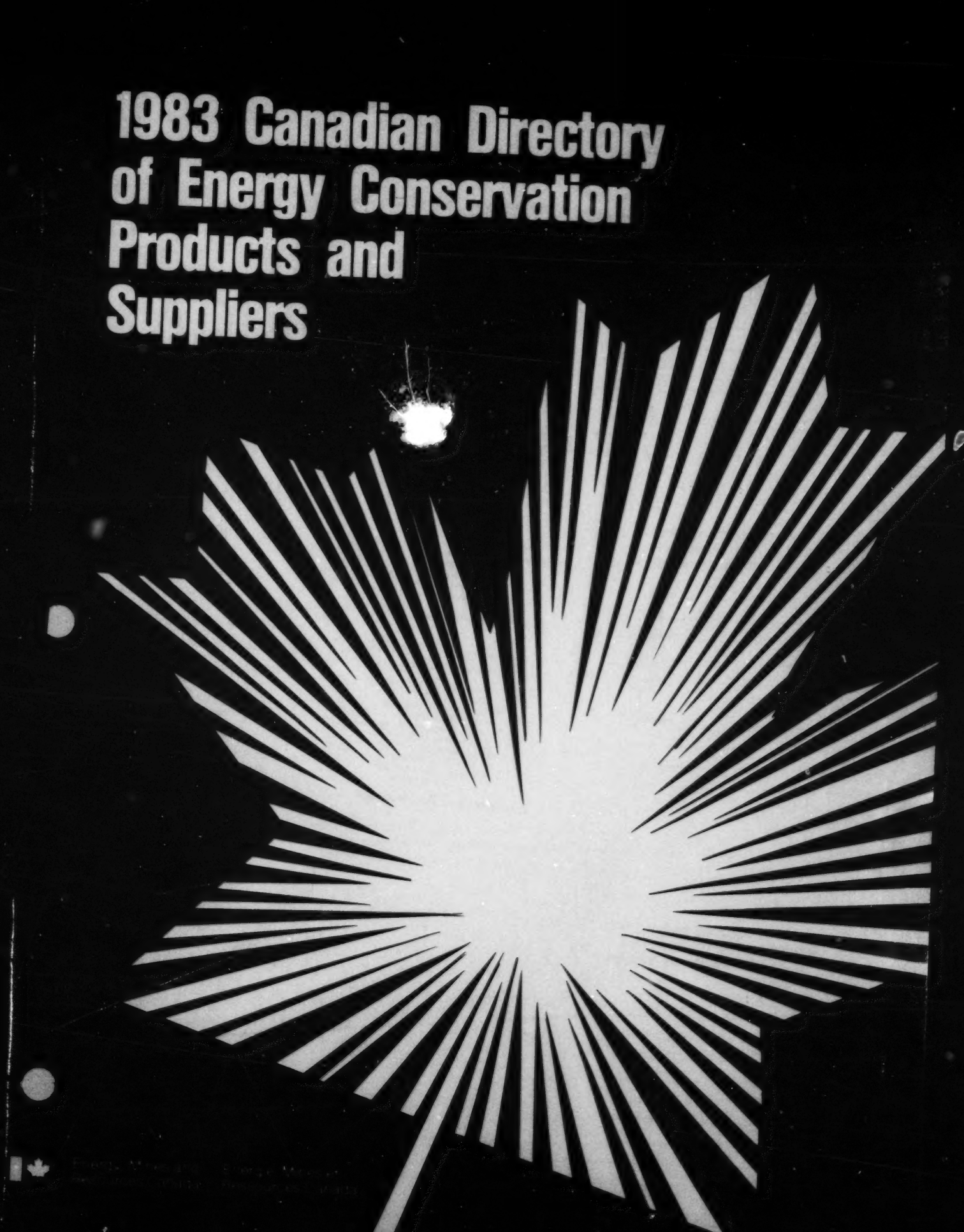
1983 Canadian Directory of Energy Conservation Products and Suppliers



84- 3844 /

ADDENDUM

Section 5—Thermal Insulation

Product listings

Thermal Insulation—by Application

01 Building envelope
02 Boilers
03 Piping
04 Tanks and vessels
05 Other
06 High temperature blankets
07 Furnaces

Manville Canada Inc 01 02 03 04

Thermal Insulation—By Material

01 Calcium silicate
02 Cellular glass
03 Ceramic fibre
04 Diatomaceous silica
05 Fibreboard
06 Glass fibre
07 Magnesium carbonate
08 Perlite
09 Phenolic foam
10 Polystyrene
11 Polyurethane/polyisocyanurate
12 Reflective metal sheet
13 Rock wool
14 Vermiculite
15 Foam insulation kits

Manville Canada Inc 01 03 04 05 06 08

Thermal Insulation—by Temperature Range

01 Low temperature (−100°C to 100°C)
02 Medium temperature (100°C to 230°C)
03 High temperature (230°C to 540°C)
04 Very high temperature (540°C to 870°C)
05 Refractory insulation (over 870°C)

Manville Canada Inc 01 02 03 04 05

Manville Canada Inc 295 The West Mall Toronto Ontario M9C 4Z7
(416) 626-5200

Dear Sir,/Monsieur,

REQUEST FOR PRODUCT INFORMATION
DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS

Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:
Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:

(Product/Produit) _____

_____

_____

Please send detailed information to:
J'aimerais donc recevoir de plus amples renseignements sur ce produit:

Name/Nom: _____

Title/Poste: _____

Company/Compagnie: _____

Address/Adresse: _____

Tel./Tél.: _____

Comments/Remarques: _____

_____

_____

_____

Dear Sir,/Monsieur,

REQUEST FOR PRODUCT INFORMATION
DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS

Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:
Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:

(Product/Produit) _____

_____

_____

Please send detailed information to:
J'aimerais donc recevoir de plus amples renseignements sur ce produit:

Name/Nom: _____

Title/Poste: _____

Company/Compagnie: _____

Address/Adresse: _____

Tel./Tél.: _____

Comments/Remarques: _____

_____

_____

_____

Dear Sir,/Monsieur,

REQUEST FOR PRODUCT INFORMATION
DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS

Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:
Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:

(Product/Produit) _____

_____

_____

Please send detailed information to:
J'aimerais donc recevoir de plus amples renseignements sur ce produit:

Name/Nom: _____

Title/Poste: _____

Company/Compagnie: _____

Address/Adresse: _____

Tel./Tél.: _____

Comments/Remarques: _____

_____

_____

_____

(Supplier's name and address/Nom et adresse du fournisseur)

_____
_____
_____

(Supplier's name and address/Nom et adresse du fournisseur)

_____
_____
_____

(Supplier's name and address/Nom et adresse du fournisseur)

_____
_____
_____

1983 Canadian Directory of Energy Conservation Products and Suppliers

Published under the authority of
The Minister of Energy, Mines and Resources Canada

Copies are available on request from

Conservation & Renewable Energy Offices
listed on pages 9 and 10 of this publication, or

Energy Conservation & Oil Substitution Branch
Department of Energy, Mines and Resources
580 Booth Street
Ottawa, Ontario
K1A 0E4

Aussi disponible en français

1983 Canadian Directory of Energy Conservation Products and Suppliers

Introduction: How-to-use this directory 5
Canadian energy conservation activity 7
Obtaining expert advice 8
Government assistance programs 9
Sources of further information 12
Section 1: Building Envelope 15
Section 2: Lighting 18
Section 3: Heating, Ventilation & Air Conditioning 21
Section 4: Heat Exchange & Recovery 24
Section 5: Thermal Insulation 27
Section 6: Combustion 30
Section 7: Steam Systems & Condensate 33
Section 8: Electrical 35
Section 9: Controls & Instruments 37
Section 10: Compressors & Turbines . 43
Section 11: Water Resource Management 45
Suppliers of energy conservation products 47

How-to-use this Directory

This directory has been compiled for Canadian industrial, commercial, and institutional energy users. Its purpose is to provide them with basic information that is essential to investigating and implementing an energy management program by identifying major areas of energy savings opportunities.

Products listed in the directory generally comply with one of the following requirements: they

1) limit or control the consumption of energy in any form, directly or indirectly, in a building, plant or process.
2) use energy more efficiently than similar products providing the same function, or can be used as an existing product "add-on", or "retrofit" to improve energy efficiency.
3) are an integral, or essential part of an energy conserving system.

Suppliers providing information on the products listed were required to describe distribution channels in Canada including addresses of all Canadian outlets, where applicable. The products must be readily available in Canada and have necessary certification where applicable.

Which products are available for energy conservation?

The eleven subject sections of this directory have been carefully compiled to enable readers to establish quickly and easily which types of product are available for energy conservation in the various spheres of energy use.

For example, an energy user who wishes to improve the energy efficiency of a lighting system should take the following steps:

a) Refer to *Section 2: Lighting*, where a summary is given of generic types of lighting and potential improvements in energy efficiency
b) Locate in the *Product Listings* the category of product required, e.g. *Fixtures and Light Source—by Type*
c) Choose sub-category required e.g. *02 High pressure sodium*
d) Identify suppliers listed with the suffix *02*
e) Turn to *Supplier Listings* section and identify which suppliers have convenient outlets in your area
f) Either contact the supplier directly or use the tear-out reply cards in this directory to inform the supplier of your interest.

Where is a particular product available?

For the reader who already knows what is required for the energy conservation activity planned, full alphabetical listings of products and sub-categories of product are given under each of the eleven sections.

The steps to follow are:

1) Choose relevant section heading, e.g. *Lighting*
2) Locate main product group
3a) Select sub-category and note two-digit code, then
b) identify suppliers' names which are followed by the same two-digit code
4) Locate suppliers' outlet in listings at the back.
5) Either contact the supplier directly or use the tear-out reply cards in this directory to inform the supplier of your interest.

Note: All suppliers listed in bold face have one or more Canadian outlets.

Other items of interest

For those embarking on new energy conservation and management activities, information has been included on selection and use of consultants and other advisors, government sources of assistance (federal, federal/provincial and provincial), current energy conservation activities in industry, commerce, and institutions, and a listing of associations and other organizations which can prove to be useful sources of further information.

Canadian Energy Conservation Activity

As part of Canada's long term objective of energy self-sufficiency and independence from imported oil, an array of programs have been launched in all sectors of the economy to motivate, educate and inform Canada's energy users about the economic benefits to corporations, institutions and individuals of a more energy-efficient society.

In industry, activities have been co-ordinated since 1975 by the Canadian Industry Energy Conservation Task Forces, now known as the Canadian Industry Program for Energy Conservation (CIPEC). There is a separate task force for each one of sixteen industrial sectors, including Chemicals, Electrical and Electronics, Farm and Industrial Equipment, Ferrous Metals, Food and Beverage, General Manufacturing, Industrial Minerals, Machinery, Mining and Metalurgy, Non-Prescription Medicine, Petroleum Refining, Plastics, Pulp and Paper, Textiles, Transportation and Wood Products. The Task Forces account for 85% of all energy use in the industrial sector, or 25% of total national consumption. A Task Force Council, comprised of the chairmen of each Task Force, co-ordinates the efforts of each sector and publishes details of progress made towards agreed targets of energy efficiency improvements.

The first five-year goal established by industry was a 12% improvement by 1980 over the base year of 1972. At the end of 1980, the average improvement in the efficiency of energy use across industry was 15.4%—substantially exceeding the target. The yearly energy savings resulting from these improved efficiencies were equal to 307 petajoules ($307 \times {}^{15}$)—the energy equivalent of over 50 million barrels of crude oil.

The Task Force have set new and ambitious goals for 1985. These targets pose a considerable challenge for industry, especially since many of the easy and least expensive conservation opportunities have been implemented. An average improvement of 23% is the goal set for all Task Forces, although each sector has its own individual target based on the special factors which affect each industry's potential for greater energy savings.

A Commercial Task Force Program has been in operation since early 1981, and it encourages and stimulates energy management in the commercial subsector by setting conservation targets, preparing audio-visual programs, publications and general information. Similar Task Forces have been established for the Office Buildings, Health-Care, and Hospitality sub-sectors. It is expected that Task Forces for universities, community colleges and schools, and the retail sub-sector will be formed by the end of 1983. In the commercial and institutional sectors, where buildings such as offices, schools, hospitals, etc., constitute nearly 20% of total energy use in Canada, several programs of assistance and target-selling exist at all levels of government. (In the May 1982 Report of the Special Committee on Alternative Energy and Oil Substitution, it was estimated that, from a 1973 base, the conservation potential for space heating alone in existing buildings is estimated to average about 50%.)

Obtaining Expert Advice

For some energy conservation projects, it can be to the advantage of the energy user to obtain the advice and services of a consultant specialising in the type of project to be executed. As the ranks of specialists in the field of energy management grow, it is important to treat selection of such an individual or company with care.

Generally, testimonials from previous clients who have used the consultant's services with success in similar projects are the best measure of suitability.

Lists of potential consultants can be prepared with the aid of the professional associations, various trade associations, chambers of commerce etc. A brief enquiry about each firm's qualifications to advise on the project at hand should be followed by a request for proposals from a short-list. Each proposal should contain the following information:

1) Past experience with projects of a similar nature to that proposed—complete with references.
2) Names and qualifications of staff to be assigned to the project.
3) Project time schedule.
4) Method proposed for execution of project.
5) Knowledge of local conditions.

Negotiations usually result in a professional service contract and an agreed fee.

Government Assistance Programs

A wide variety of programs has been funded by federal and provincial governments to provide financial and other means of assistance to Canadian energy users in the industrial, commercial and institutional sectors.

Existing programs are constantly being updated to cope with the changing needs of energy users in different provinces, and new programs are always under development. For current, accurate, details of programs which might help a particular reader, the relevant office of the federal and/or provincial energy department should be contacted directly. A full list of these addresses for both levels of government in each province follows:

Federal Offices

Newfoundland and Labrador

Conservation and
Renewable Energy Office
P.O. Box 65
215 Water Street
St. John's, Newfoundland
A1C 6C9

Prince Edward Island

Conservation and
Renewable Energy Office
P.O. Box 234
98 Water Street
Summerside, Prince Edward Island
C1N 4N6

Nova Scotia

Conservation and
Renewable Energy Office
5151 George Street
Halifax, Nova Scotia
B3J 1M5

New Brunswick

Conservation and
Renewable Energy Office
835 Champlain Street
Dieppe, New Brunswick
E1A 1P6

Quebec

Conservation and
Renewable Energy Office
605 Dorchester Blvd. West
Montreal, Quebec
H3B 1P4

Ontario

Conservation and
Renewable Energy Office
2242 Lakeshore Blvd. West
Toronto, Ontario
M8V 1A5

Manitoba

Conservation and
Renewable Energy Office
112/110 Osborne Street, South
Winnipeg, Manitoba
R3L 1Y5

Saskatchewan

Conservation and
Renewable Energy Office
119-4th Avenue South
Saskatoon, Saskatchewan
S7K 5X2

Alberta

Conservation and
Renewable Energy Office
22 Sir Winston Churchill Avenue
St. Albert, Alberta
T8N 1B4

British Columbia

Conservation and
Renewable Energy Office
5021 Kingsway
Burnaby, British Columbia
V5H 2E5

Yukon

Conservation and
Renewable Energy Office
2078-Second Avenue
Whitehorse, Yukon
Y1A 1B1

North West Territories

Conservation and
Renewable Energy Office
P.O. Box 68
4922-52nd Street
Yellowknife, North West Territories
X1A 2N1

Provincial Offices

Newfoundland and Labrador

Energy Branch
Department of Mines and Energy
95 Bonaventure Avenue
St. John's, Newfoundland
A1C 5T7

Prince Edward Island

Enersave for Industry and Commerce
Department of Tourism,
Industry and Commerce
P.O. Box 2000
73 Rochford St.
Charlottetown, P.E.I.
C1A 7N8

Nova Scotia

Enersave for Industry and Commerce
Department of Mines and Energy
P.O. Box 668
1649 Hollis Street
Halifax, Nova Scotia
B3J 2T3

New Brunswick

Energy Conservation Branch
Energy Secretariat
Province of New Brunswick
P.O. Box 6000
Fredericton, New Brunswick
E3B 4A7

Quebec

Bureau des économies d'énergie
Ministère de l'énergie et des
ressources
bureau 600
425, avenue Viger ouest
Montreal, Quebec
H2Z 1W9

Ontario

Energy Group
Ministry of Industry & Trade
7th Floor-Hearst Block
900 Bay St.
Toronto, Ontario
M7A 2E4

Manitoba

Conservation and
Renewable Energy Branch
Department of Energy and Mines
500 Portage Avenue
Winnipeg, Manitoba
R3C 0E9

Saskatchewan

Energy Conservation
Saskatchewan Energy and Mines
1914 Hamilton Street
Regina, Saskatchewan
S4P 4V4

Alberta

Energy Conservation Branch
Industrial Energy Conservation
Program
Alberta Energy and Natural
Resources
10010-106th Street
Edmonton, Alberta
T5L 3L8

British Columbia

Energy Conservation
Ministry of Energy, Mines &
Petroleum Resources
1177 West Hastings Street
Vancouver, British Columbia
V6E 2L7

Sources of Further Information

The following list of professional and trade associations, institutions and societies could be useful to readers wishing to obtain further information on specific areas of technical interest or general information about suppliers. Where there are provincial associations affiliated with a national organisation, only the address of the Canadian head office has been given. Details of local branches or associations can be obtained from these sources.

Air Conditioning & Refrigeration Wholesalers Association of Canada
5468 Dundas Street West Suite 226, Islington, Ontario M9B 6E3 (416) 239-8191

American Society of Heating, Refrigerating & Air Conditioning Engineers, Inc.
1027 Yonge Street, Toronto, Ontario (Suite 303) (416) 925-7873

Architectural Glass & Metal Contractors Association
1 Sparks Ave., Willowdale, Ontario M2H 2W1 (416) 499-4000

Asphalt Roofing Technical Committee
55 York Street, Suite 512, Toronto, Ontario M5J 1S2 (416) 363-8374

Association of Consulting Engineers of Canada
130 Albert Street, Suite 616, Ottawa, Ontario K1P 5G4 (613) 236-0569

The Biomass Energy Institute
PO Box 129, Station C, Winnipeg, Manitoba R3M 3S7 (204) 284-0472

Building Owners and Managers Association International
325 Howe Street, Suite 601, Vancouver, BC V6C 1Z7 (604) 684-3916

Canadian Boiler Society
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261

Canadian Construction Association
85 Albert Street, 2nd Floor, Ottawa, Ontario K1P 6A4 (613) 236-9455

Canadian Electrical Association
1 Westmount Square, Suite 580, Montreal, Quebec

Canadian Electrical Contractors Association
161 Eglinton Avenue E, Suite 605, Toronto, Ontario M4P 1J5 (416) 486-1290

Canadian Electrical Distributors Association
620 Wilson Avenue Suite 250, Downsview, Ontario M3K 1Z3 (416) 636-2792

Canadian Energy Research Institute
3512/33rd St. N.W., Calgary, Alberta T2L 2A6 (403) 282-1231

Canadian Fluid Power Association
1 Yonge Street, Ste 1400, Toronto, Ontario M5E 1J9 (416) 363-7261 Ext. 64

Canadian Gas Association
55 Scarsdale Road, Don Mills, Ontario M3B 2R3 (416) 447-6465

Canadian Gas Research Institute
55 Scarsdale Road, Don Mills, Ontario M3B 2R3 (416) 447-6465

Canadian General Standards Board
Place du Portage III, 11 Laurier St. Hull, Quebec (819) 997-5710

Canadian Heat Exchanger and Vessel Manufacturers Association
2175 Sheppard Ave. E. Suite 110, Willowdale, Ontario M2J 1N8 (416) 491-2886

Canadian Hydrogen Energy Society
15 Toronto Street, Suite 200, Toronto, Ontario M5C 2E3

Canadian National Committee of World Energy Conference
PO Box 4511, Station E, Ottawa, Ontario K1S 5B5 (613) 593-4624

Canadian Institute of Plumbing and Heating
5468 Dundas Street West, Suite 414, Toronto, Ontario M9B 6E3 (416) 232-2600

Canadian Lamp and Fixture Manufacturers Association Inc.
90 Rue Savard, Auteuil, PQ H7H 1M7 (514) 625-0096

Canadian Manufacturers Association
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261

Caulking Contractors Association
1 Sparks Ave, Willowdale, Ontario M2H 2W1 (416) 499-4000

The Coal Association of Canada
909 5th Avenue S.W. Ste 210, Calgary, Alberta T2P 0N8 (403) 262-1544

Electrical and Electronic Manufacturers Association of Canada
1 Yonge Street, Suite 1608, Toronto, Ontario M5E 1R1 (416) 862-7152

Electrical Bureau of Canada
1 Yonge Street, Suite 1608, Toronto, Ontario M5E 1R1 (416) 862-7152

Energy Users Council
431-41st Ave N.E., Calgary, Alberta T2E 2N4

The Engineering Institute of Canada
2050 Mansfield Street, Suite 700, Montreal, Quebec H3A 1Z2 (514) 842-8121
Ext. 30

Heating, Refrigerating and Air Conditioning Institute of Canada
5468 Dundas Street West, Suite 226, Islington, Ontario M9B 6E3 (416) 239-8191

Illuminating Engineering Society of North America
(National Capital Section) PO Box 5367, Stn. F. Ottawa, Ontario K2C 3J1

Industrial Gas Users Association
206 Laurier Ave W, Ottawa, Ontario K1P 5J8 (613) 236-8021

Canadian Property Managers Association
716 Gordon Baker Rd. Willowdale, Ontario M2H 3M8

Canadian Roofing Contractors Association
116 Albert Street, Suite 710, Ottawa, Ontario K1P 5G3 (613) 232-6724

Canadian Society for Electrical Engineering
2050 Mansfield Street, Suite 700, Montreal, Quebec H3A 1Z2 (514) 842-8121

Canadian Society for Mechanical Engineering
2050 Mansfield Street, Suite 700, Montreal, Quebec H3A 1Z2 (514) 842-8121

Canadian Standards Association
178 Rexdale Blvd. Rexdale, Ontario M9W 1R3 (416) 744-4000

Canadian Water Resources Association
PO Box 6, East Kelowna, BC V0H 1G0

Canadian Water Systems Manufacturers Association
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261 ex. 64

Canadian Window and Door Manufacturers Association
27 Goulburn Avenue, Ottawa, Ontario K1N 8C7 (613) 233-6205

Canadian Wood Energy Institute
55 Isabella Street, Toronto, Ontario M4Y 1M8

Industrial Instrument Manufacturers Association
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261

Institute of Electrical and Electronic Engineers, Inc.
(Canadian Region Office) 7061 Yonge St., Thornhill, Ont. L3T 2A6 (416) 881-1930

Institute of Power Engineers
920 Yonge Street, Suite 216, Toronto, Ontario M4W 3C7 (416) 922-6615

Mechanical Contractors Association of Canada
116 Albert Street, Suite 408, Ottawa, Ontario K1P 5G3 (613) 232-0492

Propane Gas Association of Canada
500 Fourth Ave. S.W. Suite 1202, Calgary, Alberta T2P 2V6 (403) 263-0450

Royal Architectural Institute of Canada
151 Slater Street, Suite 1104, Ottawa, Ontario K1P 5H3 (613) 232-7165

Solar Energy Society of Canada Inc.
870 Cambridge Street, Suite 303, Winnipeg, Manitoba R3M 3H5 (204) 284-3076

Thermal Insulation Association of Canada
130 Bloor Street West, Suite 1101, Toronto, Ontario M5S 2X7 (416) 964-3656

Building Envelope

Negative pressure

Many existing buildings operate at a negative pressure. This happens when exhausts have been added for various reasons without providing makeup air to replace the exhaust. Negative pressure causes infiltrated air to enter the building through any available opening and add to the load on the heating or air conditioning system.

Air tightness

Once the exhaust and supply air have been put in relative balance, (See Section 3 HVAC), the building envelope should be examined for infiltration and leakage. Seals and caulking should be renewed or added as necessary. The aim should be maximum *air tightness* of the building. The standard rubberised products used for new construction are suitable for retrofit work, along with various materials such as polyurethane foam injected into holes, film seals installed in the door or window jamb, and polypropylene film which has a longitudinal notch and comes with adhesive already applied.

Doors and openings

One basic question is to determine whether doors and windows are needed, and if not, whether the expense of blocking them up to match or blend with the remainder of the building can be justified. Another source of loss is seasonal vents if they are open when not needed. Some of the main contributors to excessive air changes are external doors and loading bays, especially in multi-storey buildings where the buoyancy of warm air produces a chimney effect, causing losses if the upper storeys are not airtight.

Various types of *doors* help to prevent heat loss, including: automatic hinged and sliding doors which only open when activated by transport or people; folding, sliding and roller shutter doors which only open the distance needed; *insulated* doors made up of rigid sections; and hinged flexible doors.

There are *door modifications* which form a barrier that is easy to move through, but which will isolate areas of a building to prevent heat loss, or heat gain, in refrigerated areas of warehouses. These include: strip doors, *strip curtains*, *air curtains*, and heated air curtains. Flexible *dock seals*, shelters and weatherhoods can also help prevent such losses where vehicles are loaded and unloaded.

Roofing and walls

Retrofitting insulation to existing buildings is often uneconomical unless there is considerable rehabilitation going on at the same time. There are some specific exceptions to this, however, including additional insulation which can readily be added to suspended ceilings and open attics. When doing a *roofing retrofit* it is possible to add a rigid board insulation or a light weight poured insulation between the old roof and the new one. There are also products available which make it possible to add a weather-protected styrene board to either the inside or outside *walls* of an existing building. In all of these additions or modifications, examination of vapour and weather barriers is extremely critical if the system is to be effective. A system is available for industrial, commercial and institutional re-roofing which is installed at an angle to allow drainage of pond water from flat roofs.

Windows

Adding double glazing or other *window modifications* may be worth

investigating in light manufacturing, warehouse, commercial and institutional applications under certain circumstances. In buildings generating a lot of internal heat from lights, people or a manufacturing process, reducing transmission losses may cause discomfort.

Window devices are available in a wide variety, including: screens, solar control *films*, transparent heat mirror films, glass coating, double-glazed units, and a selection of *insulating* and *shading devices* such as shades, blinds, drapes, shutters and other moveable insulation. The insulating layer can be internal, external or even between panes of glass.

Product listings

Air Tightness Control

01 Materials
02 Systems

3M Canada 01
Abisko Mfg. Inc. 01
Bally Refrigeration of Canada 01
Can-Am Air Leakage Control Systems 01 02
Coldstream Products of Canada Ltd. 01 02
Condecor Prod. Ltd. 01 02
Drummond Metal Products Ltd. 01
Ener-Corp Management Limited 01 02
Energy Control Centre 01 02
Energy-Wise 2000 Inc. 01 02
GTE Products Corp. 01 02
Golden Triangle Windows Ltd. 01
Graham Products Limited 01
Hanson Inc. 01
Hewlett Packard Canada Ltd. 02
Insta-Foam Products Inc. 01
Jacobs & Thompson Inc. 01
Liquiflame 01 02
Miniveil Ltd. 02
Plasti-Fab Ltd. 01
RCR 01
Rapia 02
Schlegel Canada 01
Solar Centre 02
Stran Steel Building Systems 02
Tapecoat of Canada 01
Zero Energy Products 01 02

Doors—Insulated

01 Conventional
02 Service

Alcan Building Products 01
All Glass Inc. 01 02
B. Dumenil Enterprises Inc. 01
Bally Refrigeration of Canada 01 02
Canuck Garage Doors Co. 01 02
Coldstream Products of Canada Ltd. 02
Custom Glass Ltd. 01
Energy Control Centre 02
Golden Triangle Windows Ltd. 01
J-Tak 01
Loewen Millwork 01
N. Pollard & Son 01
N.A.P. Ltd. 01
Paramount Glass & Millwork 01 02
Rapia 01
Reynolds Extrusion 01
Robert Hunt Corp. 01
S.W. Fleming Ltd. 01 02
Seyfrom Inc. 02
Superseal 01

Door Modifications

01 Air curtains
02 Dock seals
03 Strip Curtains
04 Other
05 Retrofit

Air Economy Corp. 01
Alumicor Limited 04
Bally Refrigeration of Canada 01 03
Can-Am Air Leakage Control Systems 02
Canuck Garage Doors Co. 02 03
Coldmatic of Canada Ltd. 04
Custom Glass Ltd. 04
Drummond Metal Products Ltd. 04
Energy Control Centre 02 03 02
Energy Technology Products 01
Frommelt Industries, Inc. 03
J-Tak 01
Jacobs & Thompson Inc. 04
Kelley Company Inc. 02
Kingman Industries 03
Koolshade Corporation 02 03
Longhill Combustion Products Ltd. 01
Loren Cook Company 01
Miniveil Ltd. 01
Paterson Aire Systems 01
R.R. Entwistle Ltd. 01
RCR 04
Robert Soper 02 03 04
Schlegel Canada 04
Seyfrom Inc. 02 03 04
The King Co. 01 03
Withers Environmental 03

Roofing Systems

01 New
02 Retrofit

A-Tech Moisture Surveys 01 02
Bally Refrigeration of Canada 01
Canadian General Electric Co. Ltd. 01 02
Canertech Inc. 02
Condecor Prod. Ltd. 01 02
Dow Corning Canada Inc. 01 02
Energy-Wise 2000 Inc. 01 02
Entech Inc. 01
Envirospec Inc. 01 02
Futura Coatings, Inc. 01 02
Hanson Inc. 01 02
Insul-Glass Limited 01 02
Isometals Inc. 01
Marvel-Durofoam Limited 01 02
PPG Industries Canada 02
Pittsburgh Corning 01 02
Plasti-Fab Ltd. 01 02
Powsave Systems 02
Republic Powdered Metals 01 02
Stran Steel Building Systems 01 02
Tremco (Canada) 01 02
W.R. Grace & Co. of Canada Ltd. 01 02
Westeel Rosco 01 02

Wall Systems

01 Non-structural/interior
02 Structural/exterior

Bally Refrigeration of Canada 01 02
Canadian General Electric Co. Ltd. 01 02
Canertech Inc. 01
Coldmatic of Canada Ltd. 01
Coldstream Products of Canada Ltd. 01
Condecor Prod. Ltd. 01
Energy Control Centre 01
Energy-Wise 2000 Inc. 01 02
GTE Products Corp. 01 02
Hanson Inc. 01
Isometals Inc. 01 02
Plasti-Fab Ltd. 01 02
Stran Steel Building Systems 02
United McGill 02
W.R. Grace & Co. of Canada Ltd. 01
Westeel Rosco 02
Westinghouse Canada 01
Zero Energy Products 02

Window Modifications

01 Films
02 Insulating devices
03 Shading devices
04 Other
05 Retrofit
06 Insulating glass units

3M Canada 01 02 03
Alcan Building Products 02
All Glass Inc. 02 03
Alumicor Limited 02 04
Appropriate Technology Corp. 02 03
B. Dumenil Enterprises Inc. 02
Campeau Corp. 02
Canadian General Electric 02 04
Canadian Glass Industries Ltd. 05
Canadian Great Energy Marketing 03
Chermacryl Plastics Limited 04
Clearview Insulating Glass 05
Custom Glass Ltd. 01 02
Deslwood Industries Ltd. 02
Deo-al Aluminum Windows 02 04
Drummond Metal Products Ltd. 01 02
Energy Control Centre 02
Energy Systems Company 01 02
Environmental Energies Inc. 03 04
Graham Products Limited 03
Hunter Enterprises Orillia Ltd. 02
Jacobs & Thompson Inc. 04

John C. Preston 02 03
Koolshade Corporation 01 02 03
Les Industries 02 03
Leawan Millwork 02
Modular Windows of Canada Limited 02
Multiver Ltée 02
N. Pollard & Son 02
N.A.P. Ltd. 02
Nu-Tech Glass Industries 02
Nu-Tech Mktg. Systems 02
OHM-Rite Electrical 02
P.H. Tech. Inc. 02 04
PPG Industries Canada 02
Paramount Glass & Millwork 02
RCR 02
Repla 02 03 04
Robert Hunt Corp. 02
Schlegel Canada 00
Solar Centre 02 03
Sun Ray Solar Systems 02
Superseal 01 02
Trans Canada Glass 02
Tremco (Canada) 02
Van Leer Plastics 01 02
Vitrerie Mont-Laurier 02
W.R. Grace & Co. of Canada Ltd. 02
Wescraft Manufacturing 02

Lighting

Lower lighting levels

The first of several cost-effective measures that can be taken to improve lighting efficiency is to review lighting levels. The tendency in recent years to overspecify the level of illumination means that often more light is provided for specific types of activities than is needed.

On/off switching

The cheapest and most basic rule is to turn off all lighting when it is not needed. This can be done manually, but is not very reliable, unless user education is ensured. A variety of automatic *controls* is available, including *timers, reset switches, photocells*, and scheduling *controls* linked to *microprocessor-based energy management systems*. Good rules of thumb are that *incandescent* lights should be turned off whenever not needed, *fluorescents* when the off-period will be at least 15 minutes, and *high intensity discharge* lamps when the off-period will be at least one hour. The high intensity discharge group of light sources includes *metal halide* and both *high pressure* and *low pressure sodium*.

Remove unnecessary fixtures

Delamping of overlit areas is worthwhile and *ballasts*, which consume up to 20 per cent of input power, can be disconnected for fluorescent and high intensity discharge fixtures.

A *pseudo tube* is available for use on a two-lamp fluorescent ballast. It does not give light and reduces the electrical load to one half.

Task lighting

Task or work-site lighting should be considered instead of general area lighting where the requirements vary widely within a building.

Efficient light sources

Of the different types of lighting systems available, incandescent is the least efficient, producing the lowest number of lumens per watt of electricity used. Fluorescent lamps are three times as efficient as incandescents; metal halide 1½ to 2 times as efficient as fluorescent (depending on size), and high pressure sodium 1½ to 2½ times as efficient as fluorescent. Low pressure sodium is even more efficient in large sizes, and has several outdoor applications including *security lighting*.

Upgrading

Incandescent lights should be used less or replaced with the more efficient sources. Where the operating hours of a lighting system are high, it may be advisable to upgrade fluorescent systems to metal halide or high pressure sodium. Low-wattage fluorescents are usually cost-effective replacements for standard fluorescents.

Dimming

Other than efficiency, considerations for upgrading are fixture cost, lamp cost, lamp life, and maintenance frequency. *Dimming* systems for high intensity discharge fixtures can be worthwhile to provide a proper light level with good fixture spacing and also where the area has more than one use requiring more than one light level. Such dimming systems can be combined with a photocell-actuated control which reduces energy consumption over the lamp life by compensating for lumen depreciation.

The most energy efficient *lighting fixtures* are those which control and direct the light in a way which provides more usable light for the same energy. Reflector

systems can be used to direct light precisely where it is needed, e.g., on merchandise on racks in warehouses and retail areas.

Correct selection of *lenses* can improve the efficiency of light fixtures. Among types which offer glare control as well as efficiency are prismatic and radial lenses.

Lenses

Energy savings in lighting systems involve not only the energy and demand charges for electric power, but also the cooling load involved in air conditioned areas of buildings.

Product listings

Ballasts

01 Fluorescent
02 High intensity discharge
03 Transistorized

Appleton Electric Ltd. 02
Broan Ltd. 01
Canadian General Electric 01 02
Day-Ray Products Inc. 01
Duro-Test Electric Ltd. 01 02
Electric Power Accessories Co. Limited
Empire Controls 01 02 03
Guth Lighting 01 02
Holophane 02
Infranor Canada Inc. 02
Intralec 01 02
Lightlux Prod. Inc. 01 02 03
Lightolier Canada Inc. 01 02
Luxo Lamp Ltd. 01
National Electric 01 02 03
OHM-Rite Electrical 01 02
Peerless Electric 01
Philips Electronics 01 02
Phoenix Products Co. 02 03
Prelco Electronics Ltd. 03
Prodel 02
S.L. Watkins & Assoc. 01
Sarama Lighting 01
Suntrap Systems 02 03
Synerco Systems For Energy Conservation 01 03
Vallance Brown 01 02 03
Westinghouse Canada 01 02 03
Westron 02

Controls

01 Dimming
02 Microprocessor
03 Photoelectric
04 Reset
05 Timers

ADMC Controls 01 02 03 04 05
ADT Energy Systems Ltd. 02
AMF/Paragon Electric Division 02 03 04 05
Allen-Bradley Canada Limited 05
Andover Controls Corp. 02
Automatic Controls Systems 01 02
Broan Ltd. 01
Canadian General Electric 02 03 05
Colorado Electro-optics Inc. 03
Conserval Engineering Inc. 01 03
Contric Automation Ltd. 02 05
Day-Ray Products Inc. 01
Durakool Inc. 05
E.A. Electric 01 02 03
Electric Power Accessories Co. Limited
Electromatic Components Ltd. 02 03 04 05
Empire Controls 01 02 03 04 05
Energy Management Corp. 02 03 04 05
Energy Management Systems 01 02 03 04 05
Energy Systems Company 01 02 03 04 05
GTE Sylvania 03
Gen-Tec Inc. 02 05
Guth Lighting 03
H.O.P. Consulab Inc. 02
Howlett Packard Canada Ltd. 02
Honeywell Ltd. 02 03
IDI Electric (Canada) Ltd. 01
Instrumentation & Control Systems Inc.
Instruments Champagne Int'l. 02 05
Intralec 02 03 04 05
Kaigio Electronics Co. Inc. 01 03
Keene Lighting 03 05
Koolshade Corporation 02
Lightlux Prod. Inc. 01 03
M.H. Rhodes 05
MTE 03 05
Mac Victor Mfg. 02 05
Margaux Controls Canada Inc. 02
Material Control, Inc. 02
Moore Industries Inc. 02
National Electric 02 05
Opcon 03
Pass & Seymour Canada 01
Powsave Systems 02 04 05
Precision Multiple Controls 03 05
Prelco Electronics Ltd. 01 02 03 04 05
Promac Controls Inc. 05
R.R. Entwistle Ltd. 01 04 05
Suntrap Systems 01
Synerco Systems For Energy Conservation 01 03 05
Tecnecon Electronics Inc. 01
Telemecanique Canada 03
Texas Instruments 02
Timeco 05
Tork Canada 02 03 05
Trimax Controls 02 05
Vallance Brown 01 02 03 04 05
Veeder-Root of Canada 02 03 04 05
Waugh Controls 02
Westinghouse Canada 01 04 05
Wiremold Canada 02 05
Zenith Controls 05

Distribution Devices

01 Lenses
02 Magnifiers
03 Spreaders

Comeau Technique Ltd. 02
Corning Glass Works 01 02 03
Fostoria Industries, Inc. 01 02
GTE Sylvania 01 02 03
General Scientific Equipment Co. 02
Holophane 01 03
Marix Chemical Co. 01 03
Peerless Electric 01

Fixtures & Light Sources—by Application

01 Floodlighting
02 Hazardous area
03 High-bay
04 Highway
05 Outdoor
06 Security
07 Task

Appleton Electric Ltd. 01 02 03 05 06
Broan Ltd. 06
C & M Products Ltd. 02 03 05 06 07
Canadian General Electric 01 02 03 04 05 06 07
Dual-Lite Products Ltd. 06
Duro-Test Electric Ltd. 01 02 03 04 05 06 07
Electric Power Accessories Co. Limited 04 05
Fostoria Industries, Inc. 07
GLE Inc. 02 06 07
GTE Products Corp. 01 02 03 04 05 06 07
GTE Sylvania 01 02 03 04 05 06
Guth Lighting 01 02 03 04 05 06 07
Holophane 01 02 03 04 05 06
Infranor Canada Inc. 01 04 05
Instruments Champagne Int'l. 06
Intralec 01 03 05
Keene Lighting 01 02 03 04 05 06 07
Lightlux Prod. Inc. 01 02 03 04 05
Lightolier Canada Inc. 01 05 07
Luxo Lamp Ltd. 07
National Electric 01 03
OHM-Rite Electrical 01 02 03 04 05 06 07
Philips Electronics 03 04 05 06
Phoenix Products Co. 01 02 05 06 07
Prodel 01 03 05
Prolight 03 06 07
Pyle-National of Canada 02 03
S.L. Watkins & Assoc. 05
Sarama Lighting 05 07
Thorn Lighting 01 02 03 04 05 06 07
Vallance Brown 01 02 03 04 05 06 07
Westinghouse Canada 01 02 03 04 05 06 07
Westron 01 03 05 07
York Lighting 03 06 07

Product listings

Fixtures & Light Sources—by Type

01 Fluorescent
02 High pressure sodium
03 Low pressure sodium
04 Mercury vapor
05 Metal halide

Appleton Electric Ltd. 01 02 04 05
Broan Ltd. 01
C & M Products Ltd. 01 02 03 04 05
Canadian General Electric 01 02 03 04 05
Day-Ray Products Inc. 01
Duro-Test Electric Ltd. 01 04 05
Electric Power Accessories Co. Limited 03 04 05
Fostoria Industries, Inc. 01 04
GTE Products Corp. 01 04 05
GTE Sylvania 01 02 03 04 05
Guth Lighting 01 02 03 04 05
Holophane 01 02 04 05
Infranor Canada Inc. 02 03 04 05
Intralec 02 04 05
Keene Lighting 01 02 03 04 05
Lighthux Prod. Inc. 01 02 03 04 05
Lightolier Canada Inc. 01 02 04 05
Moldcast 02 04 05
OHM-Rite Electrical 01 02 03 04 05
Peerless Electric 01
Philips Electronics 01 02 03 04 05
Phoenix Products Co. 02 04 05
Prodel 02 03 04 05
Prolight 01 02 03 04 05
Pyle-National of Canada 02 04 05
S.L. Watkins & Assoc. 01
Sarama Lighting 01
Thorn Lighting 01 02 03 04
Vallance Brown 01 02 03 04 05
Westinghouse Canada 01 02 03 04 05
Westron 04
York Lighting 01

Heating, Ventilation & Air Conditioning

Because heating, ventilation and air conditioning *(HVAC)* are common to practically all types of buildings, the opportunities for energy conservation are perhaps the most basic of all. In industrial facilities, however, it is normal to find that HVAC or environmental equipment is often the least understood and most neglected, taking second place to production or process.

Heat loss and heat gain

HVAC systems are basically designed to compensate for heat loss or heat gain and are intended to provide temperature control, *ventilation* and perhaps humidity control for the comfort of people or the operation of processes and equipment.

Heat recovery

Opportunities for the recovery of waste heat from exhaust systems, and in industrial plants, from the process itself, should be sought as a means toward reducing energy use and improving the environment.

Exhaust and makeup air should be examined for minimum quantities to meet comfort, dust, odour or other requirements. Operating hours and peak versus average demand should be examined. Process-actuated dampers or interlocks may be worthwhile to reduce quantities or confine operating time to what is needed.

Temperature setback

For areas of buildings which are occupied less than 24 hours per day and seven days per week, there is an opportunity for temperature setback during the inactive hours. The longer this time, the greater the savings will be. This opportunity should not be overlooked.

Air cleaning

Air quality requirements can be met without unnecessarily exhausting heated polluted air if this exhaust is cleaned and recycled. Various devices are available to remove smoke, fumes, odours and other pollutants and to return the clean conditioned air to the building.

Dehumidification

Dehumidification devices are available for special applications to reclaim heat from high humidity environments such as swimming pools.

Air conditioning

An air conditioning system's energy efficiency can be increased by several means, including: larger, more efficient rooftop or chiller-operated units; reduced pump and fan use with *variable capacity (air volume) systems*; varying the speed of chiller motors and inlet vanes in centrifugal systems; and installing economisers which take the condensor, compressor and chiller off line whenever outside temperatures fall to a specified level.

Destratification

Heat stratification in buildings with high ceilings is common, particularly plants, warehouses, and sports buildings. If there is 5° to 7°C temperature difference during the heating season between the working level and roof, some type of *destratification system* may be justified. If the building requires makeup air and

Section 3

also has a stratification problem, devices are available to introduce unheated outside air to roof level to mix with the hot air and provide a solution to both problems. Ceiling-mounted, three or four blade fans with a downdraft air motion are the most common devices used for destratification.

Alternative heating

In certain areas where infiltration is high (such as shipping or receiving areas, vehicle repair bays, etc) it can be worthwhile to look at an alternative to convection heating, such as *radiant* or *infrared* systems. Heating costs can be reduced and employee comfort improved.

Heat pumps

Heat pumps are now being applied to commercial and institutional buildings, and are able to transfer heat with very high efficiency. They can operate in both heating and cooling modes. Industrial-scale heat pumps extract waste energy from liquids such as warm air from condensors, cooling ponds, cooling towers, and plant processes.

Thermal storage

Thermal storage is one way of overcoming problems associated with fluctuating demands of energy. There is a variety of methods of storing large quantities of relatively low temperature heat in media such as water, organic fluids, mineral salts, sand and rock piles.

Product listings

Air Quality

01 Cleaning
02 Dehumidification

AAF-Ltd. 01 02
Aston Industries Inc. 01 02
Blackhawk Industries Inc. 01 02
Blanchard-Ness Ltd. 02
CES-Conservation Energy Systems 02
Carrier Canada Limited 01 02
Centri-spray Corp. 01
Circul-Aire Inc. 01
Clawsey-Sohrt Mfg. Co. Ltd. 01
Combustion Research Corp. 01
Corning Glass Works 02
Electro-Air Canada 01
Ener-Corp Management Limited 01 02
Energy Farms Ltd. 01 02
Energy Technology Products 01
Extech Systems 01
Fabrication Z-Air Inc. 02
Gaylord Regethermic Canada Ltd. 01
Grepon Ltd. 01
Heat Extractor Corporation 01
Henlex 01
Honeywell Ltd. 02
ICG Manufacturing Ltd. 01 02
IDH Eng. Products Inc. 02
J-Tak 01
Kahn and Company 02
Kathabar Systems 02
L-K Metal Products Co. Ltd. 01 02
Lawson Taylor Inc. 01
Lennox Industries (Canada) Ltd. 01 02
Liebert Corporation 01 02
Liquiflame 01 02
Longhill Combustion Products Ltd. 01
Miniveil Ltd. 01
Moldow Dust Control Sys. Ltd. 01
Niagara Blower 02
Northfab Systems (Canada) Ltd. 01
Paterson Aire Systems 01
Porritts & Spencer Filtration 01
Power Vac Services 01
Riverwood Enterprises & Mfg. 01
Temprite Ind. 01
United Air Specialists 01
Uraken Canada 02
Venmar 02
Vic Manufacturing 01
West Way 01

Coolers

01 Air
02 Oil
03 Water

AAF-Ltd. 01
Aerofin Corp. (Canada) Ltd. 01
Aerovent Inc. 01
Alfa-Laval Ltd. 02 03
Baltimore Aircoil of Canada 02 03
Basco Division 01 02 03
Blanchard-Ness Ltd. 01 02
C-E Canada 01
Canada Fans 01
Canadian Coleman Co. Ltd. 01
Ceilcote Canada 01
Coen Burners Canada Inc. 02 03
Darling Duro Ltd. 02 03
Duo-Matic Olsen Inc. 01 02
Energy Farms Ltd. 03 01
Energy Technology Products 01
Gas Energy Inc. 01
Grepon Ltd. 01
Honeywell Ltd. 01
Hunt & Moscrop (Canada) Inc. 01 02 03
ICG Manufacturing Ltd. 01
Ingersoll-Rand Canada Inc. 03
J.H. Lock and Sons Limited 01 02 03
Kathabar Systems 01
KeepRite Inc. 01 02 03
Liebert Corporation 01 03
Liquiflame 01
Longhill Combustion Products Ltd. 01
Muirhead Engineering Ltd. 03
Niagara Blower 01 02 03
The Arthur S. Leitch Company Ltd. 02
Vari-Cool/H&C 01
Vitter International 02 03
Young Radiator 02 03

Heat Pumps

01 Air source
02 Ground source
03 Industrial process (including high temperature)
04 Water source

AAF-Ltd. 01 04
ASEA Ltd. 04
Airtechni Inc. 01 02 04
Baltimore Aircoil of Canada 03 04
Bard Manufacturing Co. 01 02 04
Berkeley Pump Ltd. 02 04
Canadian Coleman Co. Ltd. 01
Cantherm Heating Ltd. 02 03 04
Carrier Canada Limited 01 02 03 04
Clawsey-Sohrt Mfg. Co. Ltd. 01
Dean Products Inc. 03
Duo-Matic Olsen Inc. 01
En Mar Systems Ltd. 03
Energy Control Centre 01
Energy Farms Ltd. 01 04
Heat Pumps of Canada Limited 01 02 04
Hunter Enterprises Orillia Ltd. 02 04
ICG Manufacturing Ltd. 01
J-Tak 01 02 03 04
J.H. Lock and Sons Limited 01 02 03 04
KeepRite Inc. 01
Lennox Industries (Canada) Ltd. 01
Liquiflame 01 04
Mark Hot Inc. 04
Petro-Sun 02
Ral Products 02 04
Rheem Canada 01
Sihi Pumps 03
Solar Centre 01 02 03 04
Sunsau 02 04

Product listings

Teledyne Laars Canada 04
Union Pump 03
Uraken Canada 01 03
Vic Manufacturing 01
Vitter International 03 04
West Way 01
Wylain Canada 04

High Efficiency Space Heating Systems

01 Infrared
02 Radiant

Aztec Canada Ltd. 01
Caframo Ltd. 02
Chromalox Canada 01 02
Combustion Research Corp. 01
Corning Glass Works 02
En Mar Systems Ltd. 01 02
Energy Control Centre 02
Enterprise Fdy. Co. Ltd. 02
Fostoria Industries, Inc. 01
Gen-Tec Inc. 02
Grepon Ltd. 01 02
H.O.P. Consulab Inc. 02
HCP Industrial Sales 01
Heating Alternatives Inc. 02
ICG Manufacturing Ltd. 01 02
Indusco Engineering 01
J-Tak 02
Kalglo Electronics Co. Inc. 01 02
L-K Metal Products Co. Ltd. 01 02
Lakewood Stove Co. Ltd. 02
MacLeod & Grant Ltd. 02
Modine Manufacturing Co. 01 02
Panelbloc Corp. 01 02
Radiant Tube Systems 02
Rai Products 02
Robert Bell Ind. Ltd. 02
Schwark 01
Solar Centre 02
Therma-Ray Mfg. 02
Wylain Canada 02

High Efficiency Space Heating Systems
(Supplier will specify efficiency)

01 Hybrids
02 Other
03 Electric furnaces with demand control

Automation Industries (Can) Ltd. 02
BES Team Inc. 02
Cantherm Heating Ltd. 02
Clawsey-Sohrt Mfg. Co. Ltd. 02
Danfoss Mfg. Co. Ltd. 02
Duo-Matic Olsen Inc. 02
Energy Farms Ltd. 01
Enterprise Fdy. Co. Ltd. 02
GTE Products Corp. 02
Grepon Ltd. 01
Heat-Trievor Systems 02
Heating Alternatives Inc. 02
Henlex 01
ITT Reznor 02
Kerr Controls Limited 02
Lakewood Stove Co. Ltd. 02
Liquiflame 01
Lisi Aero Guide Inc. 01
Longhill Combustion Products Ltd. 01
P.M. Wright 01
P.S.C. Controls 01
Petro-Sun 01 02
Plantguard Systems 00
Rai Products 02
Slant/Fin 01 02
Solar Centre 01
Solartech 02
Suntrap Systems 01
Thermolec 01
Thermolec Ltd. 01 03
Westcan Electrical Mfg. 02
Wylain Canada 02
Young Radiator 02
Z-Air Fabrication 02

Thermal Storage Systems

Acme Engineering Prod. Ltd.
Bally Refrigeration of Canada
Baltimore Aircoil of Canada
Clemmer Industries (1964) Limited
Condecor Prod. Ltd.
Energy Farms Ltd.
Environmental Energies Inc.
GSW Inc.
Henlex
John Wood
Petro-Sun
Solar Centre
Sun Ray Solar Systems
Therma-Ray Mfg.

Ventilation Systems

01 Destratification
02 Variable capacity
03 Other
04 Attic ventilator
05 Evaporative cooling systems

AAF-Ltd. 02
American Coolair Corp 01 03
Broan Ltd. 03
Brook Crompton Parkinson Ltd. 01
CES-Conservation Energy Systems 03
Canada Fans 03
Canarm Ltd. 01 02 03
Carrier Canada Limited 02
Ceilcote Canada 03
Chicago Blower Canada Ltd. 03
Circul-Aire Inc. 01 02 03
Clawsey-Sohrt Mfg. Co. Ltd. 01
Conserval Engineering Inc. 01
Danhart Energy Systems Ltd. 01 02
En Mar Systems Ltd. 01
Energy Systems Company 01 03
Energy Technology Products 01 02
Enredco Canada Ltd. 01
Flakt Canada Ltd. 01
Garland Commmercial Ranges Limited 02 03
Graham Company 02
Grepon Ltd. 01 02
Hayes Dana 02
Heat-Trievor Systems 01
Henlex 01 03
Hoffman Engineering Company 02
J-Tak 02
Leader Fan Ind. Ltd. 01 02 03
Lisi Aero Guide Inc. 01 02 03
Longhill Combustion Products Ltd. 01
Loren Cook Company 01 02 03
Miniveil Ltd. 01
Mitco Corporation 02 03
NovaVent North America 02 03
P.M. Wright 01 03
Penn Ventilator Can. 03
Plantguard Systems 00
Porritts & Spencer Filtration 03
Reliance Electric 02
Riverwood Enterprises & Mfg. 01
Solarsystems Industries 03
Spraycool 04
Synerco Systems For Energy Conservation 01
Taco (Canada) 03
Temprite Ind. 01
United McGill 03
Vallance Brown 01
Venair 01
Venmar 01
Vic Manufacturing 03
Wallace Ventilating Equip Co. 01 02 03
Wilcorp Mfg. 01
Wing Co. 01
Woods Fans 03

Heat Exchange & Recovery

Use for recovered heat

Nearly every HVAC installation and many processes in industry offer the possibility of heat recovery. The heat which is recovered, however, *must* be usable in order to justify retrofit on economic grounds. The first step is to determine if the recovered heat can be returned to the system or process from which it came, since such systems usually need less control and are less expensive to install.

With all types of heat recovery devices, a major consideration is that the heat transfer process is continuously working and effective, and that maintenance requirements are kept to a minimum. Actual payback on the initial investment can be substantially lengthened by reduced performance caused by fouling of heat transfer surfaces.

Air-to-air devices

Air-to-air heat recovery devices are the group which has most applications over a broad temperature range. Typical examples include recovery from furnace, kiln and boiler exhaust gases in the industrial sector; and from kitchen, laundry and restaurant exhaust in the instititional and commercial sectors. In buildings where high ventilation levels are needed for health or safety reasons, the recovered heat is used to condition cold outside air.

Air-to-air heat recovery devices include:

- *Plate (pure-plate and plate-fin)*
- *Rotary heat wheel*
- *Run-around loop*
- *Heat pipe*
- *Recuperator*

Other types available for specific applications include: thermosiphon heat exchangers, finned-tube water coils, multiple tower systems, and dry air evaporative coolers.

For general retrofit applications, particularly where recovered heat will be used elsewhere than in the originating process or where multiple exhaust and use points exist, the run-around loop offers many advantages. Although the efficiency of recovery is generally lower, the need to bring two air streams to a common device is eliminated.

Plate exchangers offer a relatively high efficiency with a low possibility of cross contamination. *Rotary heat wheels* offer a high efficiency, simple capacity control and moisture recovery, if desirable, with some cross-contamination. Heat pipes offer a high efficiency with close temperature approach if desired, no cross-contamination and no moving parts, but higher cost and reduced efficiency when the receiving end of the heat pipe becomes fouled.

Section 4

Preheat combustion air

A recuperator transfers heat from a high temperature furnace exhaust to the combustion air. It is usually less efficient than other heat recovery devices, but it is built to withstand the high temperatures exhausted from fired equipment. When applying such devices, consideration must be given to the existing combustion control system for regulating fuel-to-air ratio, since preheating combustion air will substantially change its density. Air metering must be done prior to the preheat, otherwise compensation for density change must be taken into account. A large rise in combustion air temperature will obviously require specially designed burners. Other heat recovery devices applied specifically to boilers include *economisers* and air preheaters.

Liquid-to-Liquid Air-liquid Liquid-air

Shell and tube or plate-type exchangers for *liquid to liquid* heat *transfer* are worth considering for heat recovery, in industrial plants where waste liquid streams contain usable heat. If incoming water or other liquids must be heated from lower temperatures, the economics of heat recovery may be favourable. Other designs include such devices as the double-pipe exchanger.

Industrial heat pumps

Industrial heat pumps are not yet widely used but if the present trend in the comparison between fossil fuel costs and electric power costs continues, such equipment will become increasingly viable. The possibility of recovering heat from a waste stream at lower temperature for application at a higher temperature will find wide application.

Product listings

Heat Exchange & Recovery Systems—by Heat Source

01 Air
02 Flue gas
03 Steam
04 Water
05 Other liquids

AAF-Ltd. 01
ACS-Hovac 01
Acme Engineering Prod. Ltd. 01 02 03 04 05
Aerofin Corp. (Canada) Ltd. 02 03 04 05
Aerovent Inc. 01
Alfa-Laval Ltd. 03 04
American Standard 01 03 04 05
Aston Industries Inc. 01 03 04
Atlas Polar Company Limited 03 04
B.E.S. Energy Equipment 01 03 04
Baltimore Aircoil of Canada 04 05
Bard Manufacturing Co. 01 04
Barkeley Pump Ltd. 04
Bigelow-Liptak of Canada Ltd. 05
Biraghi Entrepose 02 03 04
Blackhawk Industries Inc. 01
Blanchard-Ness Ltd. 01
Blenkhorn & Sawle Limited 01 02
Breslove Separator Co. 01 02
Brunette Machine Works Ltd. 01 03
CES-Conservation Energy Systems 01
Cambridge Filter Corp. 01
Can-Eng Sales 02
Canada Fans 01 02
Canadian Boilers Ltd. 01 02 03 04 05
Canadian Schack Ltd. 01 02
Cantherm Heating Ltd. 04
Carbone Lorraine Corp. 02 05
Carrier Canada Limited 04 05
Catalytic Damper Co. Ltd. 02
Cellcote Canada 01 02
Chromalox Canada 01
Circul-Aire Inc. 01
Coen Burners Canada Inc. 01 02 03 04 05
Combustion Research Corp. 01
Danhart Energy Systems Ltd. 01 09
Darling Duro Ltd. 03 04 05
Daan Products Inc. 01 02 03 04
Deltak Corporation 02 03
En Mar Systems Ltd. 01
Ener-Corp Management Limited 01
Energy Farms Ltd. 01 02
Energy Technology Products 01 02
Enterprise Fdy. Co. Ltd. 01
Environmental Energies Inc. 01 04
ESD Industries Inc. 04 05
FTS Systems, Inc. 04
Fabrication Z-Air Inc. 01
Farrier Inc. 01 02
Fiakt Canada Ltd. 01
Fromson Heat Transfer Ltd. 01 02 03 04 05
GSW Inc. 04
Garland Commmercial Ranges Limited 01
Gas Energy Inc. 02 04
Gaylord Regethermic Canada Ltd. 01 04
Grepon Ltd. 01
Guaranty Performance Co. Inc. 02
Heat Extractor Corporation 02
Henlex 01 02 04 05
Henry Vogt Machine 03
Hick Hargreaves and Co. Ltd. 03
Hirt Combustion Engineers 01 02 03
Honeywell Braukmann Inc. 03 04 05
Hunt & Moscrop (Canada) Inc. 01 02 03 04 05
Hunter Enterprises Orillia Ltd. 02
ICG Manufacturing Ltd. 02
IDH Eng. Products Inc. 01
ITT Fluid Products Canada 01 02 03 04 05
ITT Reznor 01
Inproheat Industries Inc. 01 02 03 04 05
Indusco Engineering 01 02
Industronics Inc. 02
Ingersoll-Rand Canada Inc. 02
J-Tak 01 02
J.H. Lock and Sons Limited 01 02 03 04 05
John Wood 03 04
Johnson Paterson Ltd. 02 03
Kerdon Mfg. Ltd. 01
Kathabar Systems 01 02
KeepRite Inc. 01 02 03 04 05
L-K Metal Products Co. Ltd. 01 02
Liebert Corporation 01
Lisi Aero Guide Inc. 01
Longhill Combustion Products Ltd. 01 02 04
Loren Cook Company 01
MacLeod & Grant Ltd. 01 04
Makinson Winchester Inc. 03 04 05
Midland Ross of Canada 01 02 03 04 05
Minivoil Ltd. 01
Mitsubishi Electric 01
Muirhead Engineering Ltd. 04 05
Niagara Blower 04
Nixon Plate Coils 03 04 05
North American Mfg. Co. 02
Olivine Corp. 02 03 04 05
Ontor 01
Ordan Thermal Products 01 02 05
P.M. Wright 01
Paterson Aire Systems 01 02 04
Paul Mueller 02 04 05
Petro-Sun 02 04 05
Plantguard Systems 03 04 02
Porritts & Spencer Filtration 01 02
Proenco Systems 01 02 03 04
Pumps & Softeners 03 04 05
Richard W. Watt & Associates 01 03
Riley-Beaird 01
Riverwood Enterprises & Mfg. 01
Robert Bell Ind. Ltd. 01 02
Robert Mitchell 01 02 03 04 05
Roth Pump 03 04
Scarborough & Grant 01 02
Sentry Equipment 04
Slant/Fin 03 04

Section 4

Product listings

Solar Centre 04
Solartech 05
Stickle Steam Spec. Co. 04
Sugar Hut Hill Holdings 01 02
Suntrap Systems 01 04
Synerco Systems For Energy Conservation 02
Taco (Canada) 03 04 05
Temprite Ind. 01 02
The Air Changer Company Ltd. 01
The Arthur S. Leitch Company Ltd. 03 04
The G & S Mill, Inc. 01
Toronto Coppersmithing Int'l. 02 03 04 05
Tranter Canada 02 04 05
Trecan 01 02
United Air Specialists 01 04 05
Utility & Industrial Supply 01 02 03 04 05
Vitter International 04 05 06
Water Refining 04
Westinghouse Canada 03
William G. Montgomery Ltd. 04 05
Wing Co. 01
York Shipley 01 02
Young Radiator 01 03 04
Z-Air Fabrication 01 02 04 05
Zedex Products 04
Zero Energy Products 01 04
Zimpro Hydro Clear 04 05

Heat Exchange & Recovery Systems—by Type

01 Duct type
02 Glycol loop
03 Plate
04 Regenerative
05 Rotary/heat wheels
06 Shell and tube
07 Spiral plate
08 Extended tube
09 Glass tube

AAF-Ltd. 02
ACS-Hovac 01 03
Acme Engineering Prod. Ltd. 01 03 06
Aerofin Corp. (Canada) Ltd. 02
Alfa-Laval Ltd. 02 03 04 07
American Standard 03 06
Aston Industries Inc. 01
Atlas Polar Company Limited 04 06
B.E.S. Energy Equipment 01 06
Baltimore Aircoil of Canada 03
Basco Division 06
Bigelow-Liptak of Canada Ltd. 01 06
Biraghi Entrepose 01 08
Blanchard-Ness Ltd. 02
Blankhorn & Sawle Limited 02 03 06
Brunette Machine Works Ltd. 02
C-E Canada 06
CES-Conservation Energy Systems 01 03
Canadian Schack Ltd. 01 06
Cantherm Heating Ltd. 02 04
Carbone Lorraine Corp. 06
Carrier Canada Limited 06
Chromalox Canada 01
Circul-Aire Inc. 01 02 05
Coen Burners Canada Inc. 01 06
Combustion Research Corp. 04
Corning Glass Works 05
Curwen & Newbery Ltd. 02 03 04 05 06
Danhart Energy Systems Ltd. 01 05 06
Darling Duro Ltd. 06
Dean Products Inc. 03
En Mar Systems Ltd. 07
Ener-Corp Management Limited 03
Energy Technology Products 01 02 05 06
Enterprise Fdy. Co. Ltd. 01
ESD Industries Inc. 06
Fabrication Z-Air Inc. 03
Farrier Inc. 02 04 06
Flakt Canada Ltd. 03 05
Fromson Heat Transfer Ltd. 06
Garland Commmercial Ranges Limited 01
Gaylord Regethermic Canada Ltd. 01 02
Grapon Ltd. 03
Heat Extractor Corporation 01
Henlex 02 03 05
Hick Hargreaves and Co. Ltd. 06
Hirt Combustion Engineers 05 06
Honeywell Braukmann Inc. 02
Hunt & Moscrop (Canada) Inc. 02
Hunter Enterprises Orillia Ltd. 01
IDH Eng. Products Inc. 03 05
ITT Fluid Products Canada 02 06
Inproheat Industries Inc. 01 06 07
Indusco Engineering 03 06
Ingersoll-Rand Canada Inc. 05
J-Tak 01 05
J.H. Lock and Sons Limited 02 06
Johnson Paterson Ltd. 06
Kerdon Mfg. Ltd. 01 03 04 05 06
Kathabar Systems 01 02
KeepRite Inc. 02 06
Lawson Taylor Inc. 05
Liebert Corporation 02
Longhill Combustion Products Ltd. 01 02 03 04 05
Loren Cook Company 01
MacLeod & Grant Ltd. 01 03 05 06
Makinson Winchester Inc. 03 06
Mark Hot Inc. 02
Midland Ross of Canada 01 02 03 04 06
Miniveil Ltd. 05
Muirhead Engineering Ltd. 02 03 06
Niagara Blower 05 01
Nixon Plate Coils 02 03
North American Mfg. Co. 06
Olivine Corp. 04
Ordan Thermal Products 01 03 05 06
P.M. Wright 05
Paterson Aire Systems 05 06
Patterson-Kelley 03 06
Paul Mueller 03
Petro-Sun 02 03 06
Plantguard Systems 06
Proenco Systems 01 03
Pumps & Softeners 06
Richard W. Watt & Associates 05 03
Riley-Beaird 06
Riverwood Enterprises & Mfg. 01
Robert Mitchell 02 06
Scarborough & Grant 04 06
Sentry Equipment 06
Sugar Hut Hill Holdings 01 04 06
Sunsau 02
Synerco Systems For Energy Conservation 07
Taco (Canada) 06
Temprite Ind. 02 03 05
The Arthur S. Leitch Company Ltd. 06
Toronto Coppersmithing Int'l. 06 07
Tranter Canada 01 03
Trecan 01 03 04 06
United Air Specialists 03 06
United McGill 01
Utility & Industrial Supply 01 03
William G. Montgomery Ltd. 06 07
Wing Co. 05
York Shipley 06
Young Radiator 02 06
Z-Air Fabrication 01 03
Zedex Products 02 06
Zero Energy Products 01
Zimpro Hydro Clear 06

Thermal Insulation

Heat loss/ heat gain

Insulation is used to prevent heat loss or heat gain; keeping the wanted heat in and the unwanted heat out. Its main value is to save on fuel costs, but it has several others, including accurate control of process temperature and protection of personnel.

Condensation

Another use of insulation is to prevent condensation forming on the surface of the equipment being covered, and therefore loss of equipment by corrosion or the nuisance effect of condensation in the work area.

Major points to look at in considering use of insulation for the first time, or retrofit, include: the possibility that original systems were inadequately designed; inadequate maintenance since the original installation, and inadequacy due to increased fuel costs since installation decisions were made.

Economical thickness

The most important analysis is to determine economic thickness. As with most engineering decisions this is a trade-off of installation and maintenance costs against the value of energy saved. Computer analyses of this problem are available from the insulation trade association and energy consultants, and can be used to cover: bare surfaces at elevated temperatures—pipe systems, tanks, vessels and equipment; retrofit for elevated temperatures—pipe systems, tanks, vessels, and equipment; and, cold systems.

In examining insulation systems, the obvious first step is to eliminate all bare surfaces and to provide the optimum amount of insulation. It is sometimes economical to re-examine the design of heat tracing systems to improve their efficiency.

Material selection

Selection of insulation should be reviewed to assure that the most effective present or added material is being considered. These limitations include compatibility with the process or environment in which it is used, *temperature range*, physical limitations, and moisture exposure.

Some typical *insulation materials* include: *mineral fibre*, available as *pipe covering*, bulk fibre, blocks and blankets, *glass fibre*, available as pipe covering, board, blanket and bulk, with a wide range of densities; *ceramic fibre*, mostly for high temperature applications including furnaces; *calcium silicate*, available in pipe covering and block form; expanded *silica; cellular glass*, available in pipe covering and block form; and, cellular plastic insulation materials including *urethane, isocyanurate* and *phenolic*.

Vapour barriers

Exposure to moisture is perhaps the factor most often missed in the selection or maintenance of an insulating system. To understand the importance of moisture, it is helpful to keep in mind that insulation saturated with water transfers heat approximately fifteen to twenty times faster than dry insulation, while insulation which has been saturated with ice transfers heat approximately fifty times as fast

Section 5

as dry insulation. These relative factors make it clear that critical attention to vapour barrier installation and maintenance and, to a lesser degree, the selection and maintenance of proper weather barriers are just as important as selection of proper thickness and type of insulation.

Building envelope

Retrofitting insulation to the building envelope is most likely to be economical when major rehabilitation is going on at the same time. Also, when there are suspended ceilings, open attics and the like, additional insulation can be readily added. Various roof insulations can be added between old ones and new retrofit roofs, and weather-protected polystyrene board can be added to inside or outside walls.

An insulation survey, then, should include a detailed maintenance list to examine existing conditions, a review of economic thicknesses, and the cost of modifying insulation in light of current and future energy costs, as well as a review of the type of insulation being used.

Product listings

Thermal Insulation—by Application

01 Building envelope
02 Boilers
03 Piping
04 Tanks and vessels
05 Other
06 High temperature blankets
07 Furnaces

Abisko Mfg. Inc. 03 04
Accessible Products Company 03 04 05
Airtechni Inc. 01 03 04 05
Albion 03
Babcock & Wilcox Refractories 02 04
Bally Refrigeration of Canada 01
Bigelow-Liptak of Canada Ltd. 02 04
Can-Am Air Leakage Control Systems 01
Can-Eng Sales 06
Canadian General Electric Co. Ltd. 03 04
Canertech Inc. 01 02 03 04
Carborundum Resistant 02 03 06
Coldmatic of Canada Ltd. 01
Condecor Prod. Ltd. 01 05
Corning Glass Works 02 03
Custom Glass Ltd. 01
Dow Chemical Canada Inc. 01
Dow Corning Canada Inc. 04
Energy-Wise 2000 Inc. 01 05
Entech Inc. 03 04
Fattal Thermocanvas 02 03 04
Fiberglas Canada Inc. 01 02 03 04
Futura Coatings, Inc. 01 04
Hanson Inc. 01
Improheat Industries Inc. 04 05
Inservac Limited 03 04
Insul-Coustic Inc. 01 02 03 04 05
Insul-Glass Limited 01 02 03 04
John C. Preston 01
KSM Canada Ltd. 01 02 04
Kerr Controls Limited 01
Liquiflame 01
Markel Corporation 05
Morval-Durofoam Limited 01
National Cellulose Corporation 05
Nu-Tech Mktg. Systems 05
Ordan Thermal Products 02 04 05
Pittsburgh Corning 01 03 04
Plasti-Fab Ltd. 01 03 04
Shaw Industries Ltd. 03
Solar Centre 03
Superseal 01
Toronto Copperamithing Int'l. 04
W.S. Libbey Company 02 03 04 05
Westroc Industries 01
Zero Energy Products 01
3M Canada 03

Thermal Insulation—by Material

01 Calcium silicate
02 Cellular glass
03 Ceramic fibre
04 Diatomaceous silica
05 Fibreboard
06 Glass fibre
07 Magnesium carbonate
08 Perlite
09 Phenolic Foam
10 Polystyrene
11 Polyurethane, polyisocyanurate
12 Reflective metal sheet
13 Rock wool
14 Vermiculite
15 Foam insulation kits

Abisko Mfg. Inc. 11 15
Accessible Products Company 03 06 11 15
Acwil Insulations Limited 01 06 13 04
Albion 03 05 06 05
Babcock & Wilcox Refractories 03
Bally Refrigeration of Canada 11
Can-Am Air Leakage Control Systems 11 15
Can-Eng Sales 03
Canadian General Electric Co. Ltd. 11
Canertech Inc. 13
Carborundum Resistant 03 06
Coldmatic of Canada Ltd. 11
Condecor Prod. Ltd. 11
Corning Glass Works 02
Dow Chemical Canada Inc. 10
Energy Control Centre 06 13 15
Energy-Wise 2000 Inc. 11
Entech Inc. 11 15
Fiberglas Canada Inc. 01 06
Futura Coatings, Inc. 11
GTE Products Corp. 03
Graham Fiber Glass Limited 06
Hanson Inc. 11
Heat Extractor Corporation 06
Heat Seal Equipment 06 13
Holmes Insulations Inc. 03 04 06 08 13 14
I.F. Industries Inc. 11 13 15
Inservac Limited 01 06 11
Insul-Coustic Inc. 01 02 03 06 13
Insul-Glass Limited 01 04 06 09 15
Kerr Controls Limited 05
Liquiflame 13
Morval-Durofoam Limited 10 11
Ordan Thermal Products 03 05 06
Pittsburgh Corning 02 06
Plasti-Fab Ltd. 10 15
Plibrico (Canada) 03
Shaw Industries Ltd. 01 06 11
Solar Centre 06 10 11 15
Superseal 11 12
Tapecoat of Canada 11 15
W.S. Libbey Company 16
Westroc Industries 11 12
3M Canada 03 12

Thermal Insulation—by Temperature Range

01 Low temperature (—100°C to 100°C)
02 Medium temperature (100°C to 230°C)
03 High temperature (230°C to 540°C)
04 Very high temperature (540°C to 870°C)
05 Refractory insulation (over 870°C)

Accessible Products Company 01 05
Albion 02 03 04
Babcock & Wilcox Refractories 03 04 05
Bally Refrigeration of Canada 01
Bigelow-Liptak of Canada Ltd. 05

Section 5

Product listings

Can-Am Air Leakage Control Systems 01
02
Can-Eng Sales 05
Canertech Inc. 04
Carborundum Resistant 02 03 04 05
Coldmatic of Canada Ltd. 01
Condecor Prod. Ltd. 01 02
Corning Glass Works 04 05
Dow Chemical Canada Inc. 01
Energy-Wise 2000 Inc. 01 02
Entech Inc. 01
Fiberglas Canada Inc. 01 02 03
Futura Coatings, Inc. 01 02
Hanson Inc. 01 02
Heat Extractor Corporation 02 03
Heat Seal Equipment 01
Holmes Insulations Inc. 01 02 03 04 05
Inproheat Industries Inc. 02 03 04 05
Inservac Limited 01 02 03 04
Insul-Coustic Inc. 01 02 03 04 05
Insul-Glass Limited 01
Kerr Controls Limited 01
Liquiflame 01
Markel Corporation 01 02
Morval-Durofoam Limited 01
Nu-Tech Mktg. Systems 01
Ordan Thermal Products 04 05
Ordan Thermal Products 05
Pittsburgh Corning 01 02 03
Plasti-Fab Ltd. 01
Plibrico (Canada) 05
Riverwood Enterprises & Mfg. 01
Scarborough & Grant 05
Shaw Industries Ltd. 01 02
Solar Centre 01 02
Superseal 01
Tapecoat of Canada 02
W.S. Libbey Company 02
Westroc Industries 01
Zedex Products 01 02

Section 6

Combustion

Types of fuel

Most opportunities for energy saving, directly from combustion, are offered by systems burning fossil fuels.

Fuels which contain higher ratios of carbon to hydrogen (such as Bunker oils) have lower stack losses than those with substantial amounts of hydrogen (such as natural gas) because water vapour formed from hydrogen combustion is lost along with its latent heat. Similarly, moisture in the fuel and combustion air causes an energy loss, but usually these losses are uncontrollable.

The only really controllable moisture is in the fuel and this applies primarily to coal-fired systems.

Reduce excess air

Stack gas temperature and excess air offer two opportunities to attack losses. To allow complete combustion and to maintain a proper flame, each *burner* and control system will need a certain amount of excess air. This can be kept to a minimum, or optimised, by *flue gas analysis* which will reduce the dry flue gas loss. Beyond tuning of existing controls, the economics of replacing the control system or even the burner to allow lower excess air quantities should be examined.

Burners

Burners must be chosen to give operating flexibility, in fuel selection and turn-down for example, together with high combustion efficiency and low emissions. *Low excess-air* burners include *axial-flow types* to cut excess oxygen to a minimum.

Monitoring and analysis

Adequate *combustion monitoring* is essential if unburned fuel is not to represent a significant source of loss. That happens with both coal and oil and with gas combustion to a lesser degree. Attempts to reduce excess air with simple control systems through *oxygen analysis* in the flue gas can produce unburned fuel and smoke. Flue gas analysis should therefore include determination of combustibles.

Heat recovery

Heat recovery from combustion processes offers good potential for savings, as long as a use for that heat exists. Returning the heat to the same, or an associated, process usually offers the best economics. In the absence of other uses, supply of building heat from the industrial process can be attractive, although it can only apply during the heating system and control can be expensive.

Boilers

Various boiler control systems are available, some of them *microprocessor-based* and offering very fine tuning of fuel and air mixes. Retrofit devices include *turbulators* which fit into boiler tubes and circulate air with the aim of transferring more heat to the water in the boiler rather than up the stack.

Heat losses specific to boilers particularly relate to heat transfer surfaces. Slagging on the fireside, scale on the water side, damaged baffles and build-up of soot on the convection sections contribute to losses. Control of these conditions involves *boiler cleaner* and *blowdown equipment*, *feedwater additives* and *conditioners*.

Section 6

The entire boiler system should be considered as a single unit including fuel supply, combustion control system, feed-water treatment and heating, deaeration, blowdown and *condensate return*.

Product listings

Boiler Cleaning & Blowdown Equipment

01 Automatic systems
02 Manual systems

Canadian Boilers Ltd. 01
Copes-Vulcan Div. 01 02
Diamond Canapower 01 02
Foxboro Canada Inc. 01
Lisle-Metrix Ltd. 01
Maxon Corporation 01 02
Metex Corporation Ltd. 01
Metropolitan Refining Co. Inc. 01 02
Ordan Thermal Products 01
Perolin-Bird Archer 01
Petro-Sun 01
Plantguard Systems 01
Raypak Thermonics (Canada) 01
Robert Bell Ind. Ltd. 02
Sentry Equipment 01
Specialty Chemicals 01
The Arthur S. Leitch Company Ltd. 01 02
Paterson Aire Systems 03
Patterson-Kelley 01
Peabody Engineering 02
Pendell Boiler 01 02
Petro-Sun 01 02 03
Plantguard Systems 03
Rai Products 01
Ray Burner 01 02
Rheem Canada 01
Riley-Beaird 03
Robert Bell Ind. Ltd. 01 03
Schwark 01
Slant/Fin 01 02
Solid Waste Management 03
Tervcon 02
Utica Steam Engine & Boiler Works 03
Vapor Canada 01 03
Volcano 01 02 03
Water Refining 02
Weiss Usa 01
Wilgood 02 03
Willer Engineering 02
Wylain Canada 01
York Shipley 01 03
The Riddaire Corporation
Thermidaire Corp. (1974)

Boilers

01 High efficiency conventional
02 Modifications for efficiency improvement
03 Waste heat recovery

Ainsworth Electric 01
Automation Industries (Can) Ltd. 01
BES Team Inc. 01
Bigelow-Liptak of Canada Ltd. 03
Biraghi Entrapose 02 03
Blankhorn & Sawle Limited 03
Brunette Machine Works Ltd. 03
C-E Canada 01 02 03
Canadian Boilers Ltd. 01 02 03
Canadian Schack Ltd. 01 03
Chromalox Canada 01
Circul-Aire Inc. 03
Clayton Industries 01 03
Conamara Limited 01 02
Conserval Engineering Inc. 02
Curwen & Newbery Ltd. 03
ESD Industries Inc. 03
Farrier Inc. 03
Foster Wheeler Limited 01 02 03
Fulton Boiler Works, Inc. 01
Gas Energy Inc. 01 03
Gotaverken Energy Systems 01 02
Henlex 01 03
Henry Vogt Machine 03
Hirt Combustion Engineers 03
ICG Canadian Propane Ltd. 02
Industronics Inc. 03
Inproheat Industries 02 03
Kerr Controls Limited 01
Konus Systems Inc. 03
L-K Metal Products Co. Ltd. 01
MacLeod & Grant Ltd. 03
Martin Oakwood Ltd. 01 03
Moldow Dust Control Sys. Ltd. 01
Mottpac Boilers Inc. 01
Nationwide Boiler Inc. 01
North American Mfg. Co. 03
Olivine Corp. 03
Onter 02
Ordan Thermal Products 02 03

Economisers for Heat Recovery

Aerofin Corp. (Canada) Ltd.
Bigelow-Liptak of Canada Ltd.
Biraghi Entrapose
Canadian Boilers Ltd.
Circul-Aire Inc.
Coen Burners Canada Inc.
Comaloo Limited
Corning Glass Works
Foster Wheeler Limited
Hunt & Moscrop (Canada) Inc.
Industronics Inc.
Inproheat Industries
Konus Systems Inc.
L-K Metal Products Co. Ltd.
Midland Ross of Canada
Nationwide Boiler Inc.
Ordan Thermal Products
Paterson Aire Systems
Peabody Gordon Platt
Petro-Sun
Plantguard Systems
Proenco Systems
The Arthur S. Leitch Company Ltd.
Tranter Canada
Trecan
Utility & Industrial Supply
Vapor Canada
Volcano
Weiss Usa

Feedwater Additives

Betz Inc.
Buckman Laboratories of Canada Ltd.
Kleen-Flo Tumbler Industries
Magnor Inc.
Metropolitan Refining Co. Inc.
Perolin-Bird Archer
Specialty Chemicals
Sternson

Fuel Oil Additives

01 Conditioners
02 Emulsifiers
03 Homogenizers

Betz Inc. 01 02 03
Buckman Laboratories of Canada Ltd. 01
Heat Recovery of Montreal 01 02
Kleen-Flo Tumbler Industries 01 02 03
Magnor Inc. 01
Perolin-Bird Archer 01 02
Specialty Chemicals 01
Sternson 01 02 03
Thermidaire Corp. (1974) 01
Wynn's Canada 01 02 03

Testing Equipment

A-Teoh Moisture Surveys
Ametek, Inc., Thermox Instruments Div.
Analygas Systems Ltd.
Bacharach Instrument Company
Baker Instruments Limited 00
Dwyer Instruments Inc.
Extech Systems
FTS Systems, Inc.
Hewlett Packard Canada Ltd.
Leco Instruments Ltd.
Metropolitan Refining Co. Inc.
Onter
Ordan Thermal Products
Pacer Industries
RAB Dedseco
Scarborough & Grant
Standard Equipment Co.
Sugar Hut Hill Holdings
Wahl International
Wilgood
Willer Engineering

Wood Waste Systems

01 Fluidized bed combustors
02 Gasification
03 Multiple chamber combustors
04 Packaged boilers
05 Pyrolysis
06 Single chamber combustors
07 Suspension burners

Alberta Industrial Development Ltd. 02 05
B.E.S. Energy Equipment 07
Bigelow-Liptak of Canada Ltd. 06
Brunette Machine Works Ltd. 01 02 04 06 07
C-E Canada 01 07
Canertech Inc. 01
Coen Burners Canada Inc. 04 07
Conamara Limited 03 06 07
Corning Glass Works 03

Product listings

F.J. Raskin 01 06 07
Foster Wheeler Limited 04
Guaranty Performance Co. Inc. 07
Heat Recovery of Montreal 02
Hunter Enterprises Orillia Ltd. 04 06
Industronics Inc. 03 05
Inproheat Industries 01 02 03 05 06 07
Kelley Company Inc. 05
Kerr Controls Limited 04
Konus Systems Inc. 04 06
MacLeod & Grant Ltd. 01 04 07
Maxon Corporation 01 07
Midland Ross of Canada 03 05 06 07
Moldow Dust Control Sys. Ltd. 06
North American Mfg. Co. 04
Olivine Corp. 03 06 07
Ordan Thermal Products 01 02 07
Parrsboro Metal Fabricators 04
Peabody Gordon Platt 07
Petro-Sun 01 02 03 04 05 06 07
Ral Products 04
Ray Burner 04
Robert Ball Ind. Ltd. 04
Slant/Fin 04
Solid Waste Management 03
Tervcon 02 05 07
The G & S Mill, Inc. 06
Trecan 01 02 03 04 05 06 07
Utica Steam Engine & Boiler Works 03
Weiss Usa 04 07
Wellons 03 04 06
Wetcom Engineering 03 06
York Shipley 01 04

Burners

01 Gas burners
02 Gas/oil burners
03 Other multifuel burners
04 Pulverised coal burners
05 Self-recuperating burners
06 Burner management systems

Aero Environmental Limited 01 02
CEA Canada 01 02 03 06
Peabody Engineering 01 02 03 04
Pandell Boiler 01 02
Robert Ball Ind. Ltd. 01 02
Volcano 01 02 03

Steam Systems & Condensate

Design and maintenance

Steam generating units and steam heating equipment offer many opportunities for conservation, because where the equipment is poorly designed, maintained, selected or sized, the energy losses are likely to be very large.

Boiler heat loss

Losses from boilers relate particularly to problems of slagging on the fire side, scales on the water side, damaged baffles and build-up of soot. *Feedwater additives, conditioners, manual and automatic boiler cleaning* and *blowdown equipment* are available to control these conditions.

Blowdown

A major source of energy loss is boiler blowdown where the loss is not only water, but also chemicals and heat. A regular program of testing for total dissolved solids in the boiler water and adjustment of the blowdown rate is a minimum measure. For boilers of 200 hp or more, *automatic control of blowdown* using conductivity meters should be considered, particularly where condensate return rates vary, or operators' testing of boiler water is not reliable.

Flash tank

Installation of a *flash tank* will *recover* low pressure *steam* from the blowdown. This steam can be used for deaeration and passed through a heat exchanger to preheat makeup water. Such a system generally involves a moderate investment.

Condensate recovery

Discharged condensate represents an energy loss, and as much of it as economically possible should be returned to the boiler.

With a low rate of condensate return, boiler feedwater control and scale formation on the water side of the tubes become more troublesome. Also, the use of make-up water requires more heating, water and chemical costs.

Economisers and preheaters

Economisers for heating feedwater, and *preheaters* for heating combustion air will help recover heat from exit gases. An economiser is usually preferable to an air preheater on high pressure boilers.

Steam traps

Steam traps are simply valves which open for condensate air and CO_2, and close for steam; but a single leaky trap will waste its purchase and installation cost every 10 to 40 days depending on size of leak and size of trap. Among the types of steam traps available are: *mechanical traps*, including *open bucket, inverted bucket*, and *float traps; float and thermostatic traps; bellows-type* and *bimetallic thermostatic traps*, and *thermodynamic controlled disc traps*.

An uninsulated steam pipe will waste, in radiation heat loss, the price of pipe insulation and its installation every 30 to 60 days depending on the size of pipe and the pressure and temperature of the steam. Where steam is used in ejectors for creation of vacuum, a comparison with mechanical vacuum pumps should be made.

Sealing leaks

Outdoor pipe insulation can become very ineffective when wet. In addition to assuring that the proper insulation thickness is in place, moisture barriers must be in good repair. Steam leak detection equipment is available to ensure proper maintenance. Various compounds are available to *seal leaks* of *steam equipment*.

In summary, all steam generation and supply equipment needs regular attention by way of planned, regular preventive maintenance.

Product listings

Condensate Control

Armstrong International, Inc.
Conval Equipment
Copes-Vulcan Div.
Escodyne Ltd.
Gelber Pumps, Inc.
Inproheat Industries
Leeds & Northrup Canada
Ordan Thermal Products
P.O. Box 479, 141 Terwood Road
Plantguard Systems
Pumps & Softeners
Robert Bell Ind. Ltd.
Roth Pump
Stickle Steam Spec. Co.
Toyoda America
York Shipley
Zedex Products

Recovery Systems

ACS-Hovac
Alfa-Laval Ltd.
Atlas Engineering & Machine Co. Ltd.
Circul-Aire Inc.
Coen Burners Canada Inc.
Conval Equipment
Escodyne Ltd.
ESD Industries Inc.
Fram Canada Inc.
Hick Hargreaves and Co. Ltd.
ITT Fluid Products Canada
Makinson Winchester Inc.
Ordan Thermal Products
Plantguard Systems
Proenco Systems
Riley-Beaird
Roth Pump
Stickle Steam Spec. Co.
The Arthur S. Leitch Company Ltd.
The Johnson Corporation
Toyoda America
United Air Specialists
Utility & Industrial Supply

Steam Leak Detection

Escodyne Ltd.
MacLeod & Grant Ltd.
Makinson Winchester Inc.
Mikron Instrument Co.
S.L. Watkins & Assoc.
Sentrol Systems
Toyoda America
Utility & Industrial Supply

Steam Traps—by Application

01 Distribution systems
02 Evaporators
03 Flash tanks
04 Jacketed kettles
05 Process air heaters
06 Shell and tube heat exchangers
07 Space heating equipment
08 Steam absorption machines
09 Tracer lines

American Standard 06
Armstrong International, Inc. 01 03 04 05 06 09
Barnes and Somes Inc. 01 02 03 04 05 06 07 08 09
C-E Canada 02 06
Corning Glass Works 06
Danfoss Mfg. Co. Ltd. 07
Datron Systems Inc. 01 02 03 04 05 06 07 08 09
Dean Products Inc. 02 03 04
Environmental Energies Inc. 00
Escodyne Ltd. 01 02 03 04 05 06 07 08 09
Filterite/Brunswick Tech. Div. 04
Flexitallic Gasket Co. Inc. 01 03 04 05 06 07 08 09
Honeywell Braukmann Inc. 01
ITT Reznor 07
KeepRite Inc. 05 06 07
Liquiflame 07
Longhill Combustion Products Ltd. 07
Makinson Winchester Inc. 01 02 03 04 05 06 07 08 09
Ogontz Controls Company 09
Ordan Thermal Products 05 06
P.O. Box 479, 141 Terwood Road 05 07 09
Pendell Boiler 03
Pumps & Softeners 06
Robert Mitchell 06 02
Suntrap Systems 07
Thermidaire Corp. (1974) 01 04 05 06
Toronto Copperamithing Int'l. 04 06
Toyoda America 01 02 03 04 05 06 07 08 05
Utility & Industrial Supply 01 02 03 04 05 06 07 08 09
Velan Inc. 01 02 05 06
Winter's Thermogauges 06
Yarway Canada 01 02 03 04 05 06 07 09
Young Radiator 06 07

Steam Traps—by Type

01 Bimetallic
02 Controlled disc
03 Disc-type thermodynamic
04 Float
05 Inverted bucket
06 Thermodynamic
07 Thermostatic

Armstrong International, Inc. 02 03 04 05 06 07
Barnes and Somes Inc. 04 07
Conval Equipment 01 02 03 04 05 06 07
Datron Systems Inc. 02 03 04 05 06 07
Escodyne Ltd. 01 02 03 04 05 06 07
Flexitallic Gasket Co. Inc. 07
HCP Industrial Sales 06
Hanlex 03 04 05 07
Makinson Winchester Inc. 01 03 04 05 06 07
Ogontz Controls Company 07
P.O. Box 479, 141 Terwood Road 07
Thermidaire Corp. (1974) 01
Toyoda America 03 04 05
Velan Inc. 01 03 05 06 07
Wright-Austin 04 07
Yarway Canada 01 02 03 05 06 07

Electrical

Major opportunities exist for reducing electrical power costs in all types of buildings and industrial production activities. In addition to reducing the power consumed, it is possible to reduce peak demand requirements and thus the related demand charges levied by the electrical utility. Together, these two functions are known as *load management*. Further possibilities include improved power factor and resulting reduced charges where these are applicable.

Consumption

The first and most simple step is to reduce total *electrical energy consumed*. Three basic principles apply:

(a) turning off and shutting down all equipment when not needed, including scheduling lighting, heating, ventilation, air conditioning;
(b) temperature setback on a permanent or at least long-term basis;
(c) optimising the efficiency of all equipment or operations consuming electricity.

Peak demands

Reducing peak demand is more complicated and involves an analysis of the frequency and magnitude of the peaks, definition of the cycle or cycles in which they occur, and then identification of the cause of each peak. Once these causes have been identified, a study can be made on methods of staggering equipment use and of shedding non-essential loads during the period when the equipment causing the peaks must be operated.

Power factor

Rewards from improved power factor depend on (1) the utility's penalty charges for below-standard *power factor* and (2) the cost of *correction*. This will require capital investment, but returns can be high. Low power factor is usually caused by: AC induction motors, (particularly underloaded ones), transformers, and lighting ballasts. Adding *capacitors* is the most common corrective measure, and is usually cost-effective when done in a bank.

Addition of individual capacitors to large induction motors offers the advantage of reducing current drawn from the system and can be useful in closely sized installations.

Monitoring and control

In order to achieve the above, all electrical power consumption has to be monitored, and controlled to some extent. Once a study of usage has been completed, it would be worthwhile investigating various devices which are available, such as *demand limiters*, *demand controllers*, *load schedulers* and *cyclers*. These devices can range from very basic unintelligent switches to sophisticated *computer-based* data acquisition and *control systems*.

Higher efficiency motors

AC induction motors are now being offered in improved efficiency models. Although the user of high efficiency motors benefits immediately from reduced energy costs, the time required to recover the initial cost premium depends on motor size and hours of use per day. The most likely applications would be where the existing motor is due for replacement.

Section 8

The option of replacing motors with energy-efficient models should be examined carefully, as the rewinding of existing motors usually results in decreased efficiency.

Product listings

Load Management

01 Electrical consumption constrol systems
02 Peak load control systems
03 Power factor correction capacitors

ADMIC Controls 01 02
ADT Energy Systems Ltd. 01 02
ASCOLECTRIC Limited 02
ASEA Ltd. 03
Atlas Polar Company Limited 02
Automatic Controls Systems 01 02
Beckman Instruments, Inc. 01 02
Bristol of Canada 01 02
CSE Ontario Limited 01 02
Can-Eng Sales 01
Canadian General Electric 01 03
Comalco Ltd. 01 02
Comington Computer System Corp. 01
Conserval Engineering Inc. 01
Contric Automation Ltd. 01 02
Control Devices 01 02
Corning Glass Works 03
Crompton Instruments Ltd. 01 02
Douglas Power Equipt. Ltd. 01 02 03
E.A. Electric 01 02 03
Electrodesign Ltd. 03
Encon Systems Inc. 01 02
Energy Management Corp. 01 02
Energy Systems Company 01 02
Gen-Tec Inc. 01 02 03
George Ellison Ltd. 01 02 03
George Kelk Limited 01 02
H.O.P. Consulab Inc. 01 02 03
Heinemann Electric 01
Hewlett Packard Canada Ltd. 01 02
Honeywell Ltd. 01 02 03
Instruments Champagne Int'l. 01
Johnson Controls Ltd. 02
Kalglo Electronics Co. Inc. 02
Leeds & Northrup Canada 01 02
Mac Victor Mfg. 01
Margaux Controls Canada Inc. 01 02
Material Control, Inc. 01
Modudata Systems Ltd. 01 02 03
Multitrol Corp. 01 02
National Electric 01 02 03
Olman Instruments 01
Ordan Thermal Products 01 02 03
P.S.C. Controls 01 02 03
Pacific Technology 01 02
Peel Energy Management 01 02
Powsave Systems 01 02
Pro Controls 01 02
Rantach Electronics 01
Richard W. Watt & Associates 01 02
Russelectric 01 02
Scientific-Atlanta 01 02
Siemens Electric 03
Solidyne 01 02
Sprague Electric of Canada 03
Square D Canada 01 02
Synerco Systems For Energy Conservation 01 02 03
T. W. Wilson Sales 03
Tecnecon Electronics Inc. 01
Texas Instruments 01 02
Thermolec 02
Time Mark 01 02
Tork Canada 02
Trimax Controls 01 02
Vallance Brown 01 02 03
Westcan Electrical Mfg. 01
Westinghouse Canada 01 02 03

Motors and Motor Systems

01 High efficiency electric motors (specify efficiency)
02 Motor control systems
03 Variable speed drives

D.J. MacAulay & Assoc. 01 02 03
ADMIC Controls 02 03
ASEA Ltd. 01 02 03
Adalet-PLM 02
Ainsworth Electric 02 03
Allen-Bradley Canada Limited 02 03
Aston Ziehl Motors Inc. 01 02
Automatic Controls Systems 02 03
BBC Brown Bovari Canada Inc. 03
Baldor Electric Co. 01
Basl Controls Limited 02 03
Bodine Electric Co. 01 02 03
Brook Crompton Parkinson Ltd. 01 03
Canadian General Electric 01 02 03
Carbone Lorraine Corp. 03
Carrier Canada Limited 03
Chloride Canada Limited 03
Conserval Engineering Inc. 02
Cutler-Hammer Industrial Control 02 03
Danfoss Mfg. Co. Ltd. 03
Doerr Electric Corp. 01 03
E.A. Electric 02 03
Eaton Corporation 01 02 03
Electrodesign Ltd. 02
Furnas Electric Canada Ltd. 02
GTE Products Corp. 02 03
Gates Canada Inc. 03
George Ellison Ltd. 02
H.O.P. Consulab Inc. 02 03
Hayes Dana 03
Hayward Tyler 01
Hewlett Packard Canada Ltd. 02
Instrumentation & Control Systems Inc.
Kalglo Electronics Co. Inc. 03
Kenscott Limited 02 03
Klockner Moeller Ltd. 02
Leeson Electric Corp. 01
MTE 02
Mannesmann Demag Ltd. 03
Marathon Electric 01
Napier-Reid Ltd. 03
Ordan Thermal Products 02
Parametrics 02 03
Peerless Pump 03
Phelan Bros. 01 02 03
Reliance Electric 02 03
Ronan Engineering 02
Roto Aire Dist. Can. 03
Saftronics 02 03
Siemens Electric 01 02 03
Solar Centre 03
Sommers Motor General or Sales 01 02 03
Square D Canada 02 03
Sterling Power System 01 03
Telemecanique Canada 02 03
Texas Instruments 02
Vallance Brown 01 02
Wer Canada 01 02 03
Westinghouse Canada 01 02 03
Wylain Canada 02
Zero-Max 03

Controls & Instruments

Monitoring and checking

Instruments are important to energy management because they can be used to permanently *monitor* energy use and factors affecting energy consumption in buildings and processes, and to make periodic checks and audits of progress towards greater efficiency, including seeking out new opportunitites.

Accuracy

All instrumentation has to be calibrated and maintained on a regular basis to provide reliable data. *Boiler* systems, for example, are usually equipped with *steam flow* measuring and integrating equipment, however the common orifice type is subject to substantial error if not corrected for operating pressures different from the pressures at calibration time. *Combustion* processes using liquid fuels will need some type of reasonably accurate measurement of *fuel* consumed. In-line *flow meters* can be used or *level gauges* can be installed on the storage tanks. Such instrumentation usually needs to be added to existing systems for ongoing energy measurement. Investment in a portable oxygen and combustion analyser may be justified where combustion processes consume significant amounts of fuel.

Audits

Measuring instruments are both the beginning and the end of a successful energy audit. Various types which might be used include: *thermometers, anemometers, ammeters, timers, tachometers, and recording ammeters*.

Building energy management

Control of energy consumption in buildings and plants is achieved by a variety of systems, applying different methods of control to all energy-using equipment including *lighting, heating ventilating, air-conditioning, process equipment* and *production machinery*.

When *building services* are being controlled, three types of energy management exist:

(a) manual control (delegating employees to switch on and off);
(b) simple machine control (using devices such as *time clocks*);
(c) *computer control systems*.

Typical forms of control exercised by the computer systems for *building energy management* include *time-based scheduling, duty cycling, demand control, optimum start-stop, ventilation control, economiser control (for air conditioning)* and *enthalpy control*. *Direct digital control* refers to sensing and control of equipment directly with digital control electronics, and is becoming more popular in large institutional and commercial buildings.

Lighting

Lighting systems can be controlled with an increasingly wide variety of methods including *ultrasonic sound switches, photocells, movement sensors, automatic dimming systems* for all types of light sources including fluroescents and high intensity discharge.

Section 9

Industry

Programmable controllers are already being used in industry for controlling and monitoring some production activities and processes. They can be programmed quite simply for several energy management functions.

Combustion

It is worth considering *combustion control* systems to provide better *fuel-to-air ratio control* over the burner firing range. Fully metered systems and *oxygen trim systems* are gaining acceptance. *Automatic blowdown control* can also be a wise investment.

Process

Automated *process control* of energy intensive operations by the use of on-line computer control systems can yield fast paybacks on the investments in instrumentation.

Product listings

Analyzers

01 Air quality
02 Combustion
03 Flue gas
04 Process
05 Water
06 Opacity

Acme Engineering Prod. Ltd. 01
Ametek, Inc., Thermox Instruments Div. 03
Analygas Systems Ltd. 01 02 03 04
Autocon Industries, Inc. 05
Aviation Electric Ltd. 01 04
Bacharach Instrument Company 02 03
Barber Industries 04
Beckman Instruments, Inc. 01 02 03 04 05
Bristol of Canada 02 04 05
Caframo Ltd. 01
Caltrol 01 03 04 05
Can-Eng Sales 02
Canadian Applied Technology 01 05
Capital Controls 05
Circul-Aire Inc. 00
Cla-Val Canada Ltd. 05
Cleveland Controls Inc. 02 03 04 05
Coen Burners Canada Inc. 02
Comeau Technique Ltd. 01 05
Conamara Limited 02
Dwyer Instruments Inc. 03 08 09 15
Dynatron Inc. 01 03 06
Emerson Electric Canada Ltd. 02
Energy Management Systems 01 02 03 04 05
Energy Systems Company 01
Energy Systems Inc. 02
Enmet Canada Ltd. 01
Escodyne Ltd. 04
Esterline Angus Instrument Corp 04
Extech Systems 01 02 03
FE Myers Can. Ltd. 05
Fielding Crossman & Assoc. Ltd. 03 04 05
Fischer & Porter (Canada) Ltd. 04
Foxboro Canada Inc. 04
Furneco Industrial Supplies & Instr. Co. Ltd. 02 03
Gas Energy Inc. 02
Hach Company 04 05
Hewlett Packard Canada Ltd. 01 02 03 04 05
Inficon Systems Ltd. 02 03 04 05
Inproheat Industries 02 04 05
Instruments Champagne Int'l. 02 03 04 05
Kahn and Company 01
Leco Instruments Ltd. 04
Leeds & Northrup Canada 01 02 03 04 05
Leonard Electric (1981) Limited 04
Levitt-Safety Limited 01
Liquitrol Ltd. 05
MacDonald Process Equipment Ltd. 04 05
MacLeod & Grant Ltd. 02
Maxon Corporation 02
Measurex Inc. 01 02 03
Metex Corporation Ltd. 05
Milton Roy Industries Ltd. 01 02 03 05
Motorola Ltd. 02 05
National Sonics Div of Xertex 05
Newport Electronics 04
North American Mfg. Co. 02 03
Ontor 02
Ordan Thermal Products 02 03 04
Paco Pumps 05
Photomation 06
Presto Tek 05
RAB Dadesco 02 03
Research Appliance Co. 01 02 03 04
Robert H. Wager 02
Robertshaw Controls Canada 04
Rochester Instrument Systems 04
Rosemount Analytical 04 05
Safety Supply Canada 01
Scarborough & Grant 02 03
Soget 04
Syncro Flo 05
Teledyne Analytical Instr. 01 02 03 04 05
Teledyne Lears Canada 01
Tervcon 02 05
Texas Instruments 04
Water Refining 05
Weed Instrument Company, Inc. 03 04 05
Western Research 03 04
Willer Engineering 01 02 03 04 05
York Instruments 03

Controls—by Function

01 Building energy management
02 Combustion
03 Compressed air
04 Condensate
05 Electrical consumption
06 Electrical demand
07 Electric motors
08 Fans
09 Flow
10 Heating
11 Humidity
12 Lighting
13 Motor Speed
14 pH
15 Pressure
16 Process
17 Pump
18 Steam
19 Temperature
20 Time
21 Level

A.W. Cash Valve Mfg. Corp. 03 15 18 19
ADMIC Controls 01 03 05 06 07 08 09 10 11 12 13 15 17 19 20
ADT Energy Systems Ltd. 01 05 06 07 08 09 10 11 12 13 15 17 19 20
AMF/Paragon Electric Division 01 06 20
APE Canada Inc. 03 08
ASCOLECTRIC Limited 01 06 09 12 16 19
ASEA Ltd. 07 13
Adalet-PLM 07
Ainsworth Electric 13
Airtechni Inc. 04
Alexander D. Smart Ltd. 10 11 15 16 19
Allen-Bradley Canada Limited 07 08 12 13 15 19 20
Allied Witan Co. 03
American Stabilis, Inc. 01 10 19 20
Ametek, Inc., Thermox Instruments Div. 02
Analygas Systems Ltd. 02 11 14 15
Analytical Measurements of Canada Ltd. 14 19
Andover Controls Corp. 01
Armstrong International, Inc. 04 11 18
Aston Zieht Motors Inc. 08 13
Autocon Industries, Inc. 09 13 14 15 16 17
Automatic Controls Systems 01 05 06 11 12 13 16 17 18 19 20
Aztec Canada Ltd. 10
BBC Brown Boveri Canada Inc. 07 09 11 13 14 15
Bailey Controls 02 09 15 18 19
Baker Instruments Limited 09 15 19
Banvil Limited 07 08 13
Barber Industries 09 15
Barber-Colman of Canada Ltd. 01 10 11 16 19
Beckman Instruments, Inc. 01 02 04 08 11 14 16 18 19
Beel Controls Limited 07 13 17 19
Berkeley Pump Ltd. 17
Blenkhorn & Sawle Limited 16

Section 9

Product listings

Bodine Electric Co. 07 13
Brasiova Separator Co. 08
Bristol of Canada 02 05 06 09 11 14 15 16 17 18 19 20
Broan Ltd. 13 20 12
Brook Crompton Parkinson Ltd. 07
Brooks Instrument Div. 09
Brooks Instrument Division 09 15
C-E Canada 02
CESCO 01 05 06 10 11 12 18 19 20
CSE Ontario Limited 01 05 06 10
Caframo Ltd. 08 10
Caltrol 09 10 11 14 16
Can-Eng Sales 02 15 16
Canada Fans 08
Canadian General Electric 05 06 07 09 12 13 15 16
Canadian General Electric 01 07 12
Canadian Worcester Controls Ltd. 09
Canarm Ltd. 07 08
Canertech Inc. 05
Capital Controls 09 15 17
Chemiquip Canada Inc. 09 15
Circul-Aire Inc. 01 03 10
Cla-Val Canada Ltd. 15
Cleveland Controls Inc. 02 19
Coen Burners Canada Inc. 10
Colorado Electro-optics Inc. 12
Comalco Ltd. 01 05 06 09 10 19 20
Comeau Technique Ltd. 14 19
Comington Computer System Corp. 01 05 06
Compak Canada Inc. 03
Conamara Limited 02
Conserval Engineering Inc. 12 18 19 20 01 05 10
Contric Automation Ltd. 01
Control Devices 01 05 06 07 08 09 10 11 12
Conval Equipment 03 04 15 16 19
Corning Glass Works 02
Crompton Instruments Ltd. 06
Cutler-Hammer Industrial Control 01 13
Danfoss Mfg. Co. Ltd. 10 15 18 19
Devar Inc. 01 02 05 09 13 14 16 19
Douglas Power Equipt. Ltd. 01 05 06
Dresser Canada Inc. 15 16 19
Duncan Instruments Ltd. 05 06 12 19
Durakool Inc. 01 06 07 10 12 17 19 20
Dynatron Inc. 00
E.A. Electric 01 06 12
EEV Canada Ltd. 01
Electric Power Accessories Co. Limited
Electrodesign Ltd. 07 13
Electrohome Limited 07
Electromatic Components Ltd. 06 08 10 11 12 13 14 15 16 17 19 20
Emerson Electric Canada Ltd. 02 07 08 10 19
Empire Controls 01 05 06 08 10 12 19 20
Encon Systems Inc. 05 06
Energy Management Corp. 01 04 05 06 07 08 09 10 11 12 13 15 16 17 18 19 20
Energy Management Systems 01 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20
Energy Systems Company 01 05 06 08 10 11 12 15 18 19 20
Energy Systems Inc. 02
Escodyne Ltd. 10 11 15 16 17 18 19 20
Esterline Angus Instrument Corp 02 05 06 14 15 16 17 18 19
FE Myers Can. Ltd. 17
FX Systems Corporation 15 16 19
Fielding Crossman & Assoc. Ltd. 09
Fischer & Porter (Canada) Ltd. 09 16
Fisher Controls Co. of Canada Ltd. 01 03 04 09 15 16 18 19
Flair Hydronics (Canada) Ltd. 01 10 18 19
Foxboro Canada Inc. 02 05 06 09 14 15 16 19
Furnaco Industrial Supplies & Instr. Co. Ltd. 15
GTE Products Corp. 05 06 13
Gas Energy Inc. 02 10 19
Gen-Tec Inc. 05 06 10 20
George Kelk Limited 05 06
Graham Company 07 08 13
Guildline Instruments Limited 19
H.O. Trerice 10 11 15 19
H.O.P. Consulab Inc. 01 05 06 07 10
Haakel Inc. 03 09 15 17
Heat Recovery of Montreal 02 04
Hecon Canada Inc. 16 20
Heka Controls Ltd. 03 04 09 10 15 16 17 18 19
Honeywell Braukmann Inc. 01 09 10 15 18 19 20
Honeywell Ltd. 01 03 05 07 08 10 11 12 15 19
ICG Manufacturing Ltd. 02 08 10 19
ITT Fluid Products Canada 01 02 03 04 10 15 16 17 18
ITT Vulcan Electric 19
Industrial Air Inc. 08
Inficon Systems Ltd. 02
Ingersoll-Rand Canada Inc. 03
Inproheat Industries 02 04 09 16
Instrumentation & Control Systems Inc. 13 16 20
Instruments Champagne Int'l. 01 02 05 06 09 10 11 14 15 16
Intertechnology Limited 01 11 15 19
Intralec 01
Isolation Systems 01
Jo-Bell Products Inc. 04
John C. Ernst Co. 09
Johnson Controls Ltd. 01 02 03 05 06 08 09 10 11 12 15 16 18 19 20
Kahlsico Int'nl. Corp. 11 19
Kaiglo Electronics Co. Inc. 06 08 10 12 19
Klockner Moeller Ltd. 07
Lakeshore Electric Corp. 05 06
Land Instruments Inc. 19
Leeds & Northrup Canada 02 04 05 06 09 10 11 14 15 16 19
Leslie International 15 18 19
Liquiflame 01 10 11 19
Liquitrol Ltd. 15 19
Lisi Aero Guide Inc. 01 07 13 19
Lisle-Metrix Ltd. 11 14 16 20
M.H. Rhodes 20
MCC Powers 01 06 12 19
MTE 07 12 13 15 20
Mac Victor Mfg. 01 05 06 07 08 10 12 19 20
MacDonald Process Equipment Ltd. 09 13 15 16 18 19 20
Makinson Winchester Inc. 15 18 19
Margaux Controls Canada Inc. 01 05 06 08 10 11 19 20
Markko Construction 19
Marsh Instrument Canada 15 19
Masoneilan Canada Ltd. 15 19
Material Control, Inc. 01 05 06
Matheson 03 09 15
Maxon Corporation 02 09
Measurex Inc. 02 06 16
Met-Pro Corporation 17
Metex Corporation Ltd. 09 14
Metritape, Inc. 21
Micronet Limited 01 05 06 16
Mikron Instrument Co. 19
Milton Roy Industries Ltd. 02 04 09 14
Modudata Systems Ltd. 01 05 06
Moore Industries Inc. 02 03 04 05 06 07 08 09 10 12 13 14 15 16 17 18 19 20
Motorola Ltd. 06 07 08 17
Multitrol Corp. 01 05 06 07 08 09 10 11 12 13 15 16 17 18 19 20
Napier-Reid Ltd. 08 17
National Sonics Div of Xertex 14 16
Newport Electronics 09 13 15 16 19 20
North American Mfg. Co. 02 06 19
Numatics 03
OHM-Rite Electrical 08 10 12
Ogontz Controls Company 18 19
Ohio Semitronics 05 06
Olman Instruments 05 06
Ontor 10 11 19
Ordan Thermal Products 02 04 05 06 08 09 10 15 16 18 19 20
P.S.C. Controls 01 05 06
PSG Industries 10 19 20
Parametrics 13
Pacific Technology 01 05 06
Paco Pumps 04 15 17
Peal Energy Management 01 05 06 08 10 12 19 20
Peerless Pump 08 09 13 15 17 19
Phelan Bros. 07 13 14
Plantguard Systems 01 04
Powsave Systems 01 05 06 10 12 19
Precision Multiple Controls 12 20
Preso Industries 09
Presto Tek 01 14 19
Pro Controls 01 02 05 06 16
Promac Controls Inc. 07 09 13 15 16 19 20
R.R. Entwistle Ltd. 08
Ramsey Controls 13
Reuter-Stokes Canada 19
Rexanne Products 19
Robert H. Wager 02
Robertshaw Controls Canada 01 10 19
Rochester Instrument Systems 05
Rockwell International of Canada 15
Ronan Engineering 07
Rosemount Analytical 14
STC Controls 16
Safety Supply Canada 08 10
Saftronics 07 13 17 19
Scarborough & Grant 02 16 19
Scientific-Atlanta 01 05 06 08 09 10 12 19
Sentrol Systems 01
Serfilco 03 14
Shortridge Instruments 01 09
Siemens Electric 07 13
Simplex Int'l Time Eq. 01 05 06 07 08 12
Singer Company of Canada 09 15 19
Sirco Products 15 19
Skan-A-Matic 16
Solar Centre 01 05 10 17 19 20
Solidyne 01 05 06 19
Sommers Motor General or Sales 07 08 09 10
Square D Canada 01 05 06 15 17
Standard Equipment Co. 01 04 15 18 19
Suntrap Systems 08 10 14 19
Surgeonics 10
Syncro Flo 17
Synerco Systems For Energy Conservation 01 05 06 08 12 19 20
Taco (Canada) 10
Tanner Systems of Canada 04
Tecnecon Electronics Inc. 12 13
Tekelek 13
Teledyne Inet 06 07
Telemecanique Canada 07 13
Tervcon 01 06 12 15 17
Texas Instruments 01 05 06 07 08 09 10 11 13 14 15 16 18 19 20
The Electric Tachometer Corp. 13
The Mercoid Corporation 15 19
The Riddaire Corporation 10
Therma-Ray Mfg. 19 20
Thermal Energy Devices 19
Thermax Canada 07
Thermo Electric (Canada) 05 19
Thermolec 08 10 19
Time Mark 05 06 20
Timeco 20
Tork Canada 12 20

Section 9

Product listings

Transmation Canada 19
Trimax Controls 01
Uehling Instrument 15 16
Union Pump 17
United Electric Controls (Canada) 15 19
Valcor Engineering 09
Vallance Brown 01 08 12 20
Veeder-Root of Canada 20
Veronics Instruments 03 11
Viking Pump Co. of Canada 17
Wahl International 19
Water Refining 14
Waugh Controls 16
Weed Instrument Company, Inc. 19
Weiss Instruments 19
Wer Canada 07
West Instrument 10 11 15 19
West Way 10 19
Westcan Electrical Mfg. 01 05
Westinghouse Canada 02 07 09 12 13 14 15 19
Westinghouse Vectrol 05 06 07 13
Wilcorp Mfg. 01 08
Wilgood 01 04 09 10 19
Willer Engineering 02 09 14 15 16 19
Wiremold Canada 01 20
Wylain Canada 07 17
York Instruments 11 14
Zenith Controls 20
Zimpro Hydro Clear 16

Controls—by Type

01 Electrical
02 Electronic
03 Mechanical
04 Microprocessor
05 Photoelectric
06 Pneumatic
07 Thermostat

A.W. Cash Valve Mfg. Corp. 06
ADMIC Controls 01 02 04 05 06 07
ADT Energy Systems Ltd. 01 02 03 04 05 06 07
AMF/Paragon Electric Division 01 02 03 04 05 07
ASCOLECTRIC Limited 01 02 06
ASEA Ltd. 01 02
Acme Engineering Prod. Ltd. 02 04
Adalet-PLM 01
Alexander D. Smart 02
Alexander D. Smart Ltd. 02 04
Allen-Bradley Canada Limited 01
Allied Witan Co. 06
American Stabilis, Inc. 02 04 07
Anbak Sales Canada Ltd. 07
Andover Controls Corp. 04
Atlas Polar Company Limited 01 02
Automatic Controls Systems 01 02 04 07
BBC Brown Boveri Canada Inc. 02
BLM Automatic Clutch Ltd. 03
Bailey Controls 02 04 06
Bakar Instruments Limited 02 04 05 07
Banvil Limited 02
Barber Industries 01 03 06
Barber-Colman of Canada Ltd. 01 02 04 06
Beckman Instruments, Inc. 02 04
Beel Controls Limited 01
Bindicator Company 01 02 03 06
Blenkhorn & Sawle Limited 04
Bodine Electric Co. 02
Bristol of Canada 01 02 03 04 06
Broan Ltd. 07
Brooks Instrument Division 01 06 07
CESCO 02 04 05 06
CSE Ontario Limited 01 02
Caltrol 01 04 06
Can-Eng Sales 01 02 03 04 06
Canadian Applied Technology 02 04
Canadian General Electric 01 02 03 04 05
Canertech Inc. 01
Capital Controls 01 02 03 06
Chemiquip Canada Inc. 06
Chromalox Canada 07
Cla-Val Canada Ltd. 01
Cleveland Controls Inc. 01 02
Colorado Electro-optics Inc. 05
Comalco Ltd. 01 02 03 04 07
Comeau Technique Ltd. 01
Comington Computer System Corp. 04
Conserval Engineering Inc. 01 02 04 05
Contric Automation Ltd. 01 02 04 07
Control Devices 01 02 04
Conval Equipment 06
Copes-Vulcan Div. 02
Crompton Instruments Ltd. 01 02
Cutler-Hammer Industrial Control 01 02 04
Danfoss Mfg. Co. Ltd. 01 02 07
Devar Inc. 02
Douglas Power Equipt. Ltd. 01 02 04
Dresser Canada Inc. 02 06 07
Durakool Inc. 01
Dwyer Instruments Inc. 06
Dynatron Inc. 02 04
E.A. Electric 01 04
Electric Power Accessories Co. Limited
Electrodesign Ltd. 01 02
Electromatic Components Ltd. 01 02 04 05 07
Emerson Electric Canada Ltd. 07
Empire Controls 01 02 03 04 05 06 07
Encon Systems Inc. 04
Energy Management Corp. 01 02 04 05
Energy Management Systems 04 06 07
Energy Systems Company 01 02 03 04 05 06 07
Energy Systems Inc. 04
Escodyne Ltd. 01 03 07
Esterline Angus Instrument Corp 02 04
FE Myers Can. Ltd. 01
Fischer & Porter (Canada) Ltd. 02 06
Fisher Controls Co. of Canada Ltd. 02 03 04 06
Flair Hydronics (Canada) Ltd. 01 07
Foxboro Canada Inc. 02 06
Furnas Electric Canada Ltd. 01
GTE Products Corp. 01 02
Gas Energy Inc. 01 02 07
Gen-Tec Inc. 01 02 04
Gould Inc., Industrial Controls Division 01 02 05
H.O. Trerice 01 03 06 07
H.O.P. Consulab Inc. 01 02 04 07
Haskel Inc. 06
Hecon Canada Inc. 01 02 05 06
Heinemann Electric 01 02
Hoke Controls Ltd. 02 03 04 06
Honeywell Braukmann Inc. 01 03
Honeywell Ltd. 01 04 06 07
ITT Fluid Products Canada 06 07
ITT Vulcan Electric 07
Industronics Inc. 01 02 04
Inficon Systems Ltd. 01 02 06
Inproheat Industries 01 02 03 04
Instrumentation & Control Systems Inc.
Instruments Champagne Int'l. 02 04
Intertechnology Limited 02 04
Intralec 01 02 03 04 07
Isolation Systems 01
John C. Ernst Co. 01 03
Johnson Controls Ltd. 01 02 03 04 06 07
Kahn and Company 06
Kaiglo Electronics Co. Inc. 01 02 05
Keene Lighting 01 05
Kenscott Limited 03
Klockner Moeller Ltd. 01 02
L-K Metal Products Co. Ltd. 07
Lakeshore Electric Corp. 01 02
Leeds & Northrup Canada 01 02 04
Leelis International 06
Liquiflame 01 07
Liquitrol Ltd. 01 03 06
Lisi Aero Guide Inc. 01 02 06
Lisle-Metrix Ltd. 02
MCC Powers 06 07
MTE 01 02 05 06
Mac Victor Mfg. 03 04
Makinson Winchester Inc. 01 07
Margaux Controls Canada Inc. 04
Markko Construction 02
Masonsilan Canada Ltd. 06
Material Control, Inc. 04
Maxon Corporation 01 03 06
Measurex Inc. 04
Metex Corporation Ltd. 01 02
Metritape, Inc. 01
Micronet Limited 02 04
Milton Roy Industries Ltd. 02 03
Modicon Canada Ltd. 01 02 04
Modudata Systems Ltd. 02
Moore Industries Inc. 02 04
Motorola Ltd. 02 04
Multitrol Corp. 02 04 07
National Sonics Div of Xertex 02
Neeco Industries 01 03 05 06
Newport Electronics 02
North American Mfg. Co. 02 06
Numatics 06
Ogontz Controls Company 07
Ontor 02 03 07
Opcon 05
Ordan Thermal Products 01 02 03 07
P.S.C. Controls 01 02
PSG Industries 01 02 04 07
Parametrics 02
Pacific Technology 04
Paco Pumps 01
Pass & Seymour Canada 02
Peabody Engineering 04
Peel Energy Management 01 02 04 05
Phelan Bros. 01 02
Photomation 05
Plantguard Systems 01 02 04
Potter & Brunfield 01 02 04
Power/Mate Corp. 02
Powsave Systems 01 02 04 05 07
Precision Multiple Controls 01 05
Pro Controls 01 02 04
Promac Controls Inc. 02 04
R.R. Entwistle Ltd. 01
Ramsey Controls 02
Rantach Electronics 02 04
Robert H. Wager 05
Robertshaw Controls Canada 01 06 07
Rochester Instrument Systems 04
Rockwell International of Canada 02
Ronan Engineering 02
STC Controls 02 04
Saftronics 01 02
Scarborough & Grant 01 02 07
Scientific-Atlanta 01 02 04 07
Sentrol Systems 04
Shortridge Instruments 03
Siemens Electric 01 02
Silonex 05
Simplex Int'l Time Eq. 02 04
Singer Company of Canada 06
Skan-A-Matic 05
Solar Centre 07
Solidyne 02 04
Square D Canada 01
Standard Equipment Co. 02
Suntrap Systems 02 07
Surgeonics 04
Syncro Flo 01 02 03
Synerco Systems For Energy Conservation 01 02 03 04 07
Taco (Canada) 02 07
Tecneeon Electronics Inc. 02
Tekalek 02
Teledyne Inet 03
Telemecanique Canada 01 02 04 05 06
Tervoon 02 04 06
Texas Instruments 02 04
The Marcold Corporation 06 07
Thermal Energy Devices 02

Section 9

Thermo Electric (Canada) 02
Thermolec Ltd. 02 07
Time Mark 02 04
Timeco 02
Tork Canada 01 02 03 04 05
Transmation Canada 02 04
Trimax Controls 04
United Electric Controls (Canada) 02 03 06
Valcor Engineering 01
Valera Electronics 02 04 07
Vallance Brown 01 05
Veeder-Root of Canada 01 02 03 04 05
Veronics Instruments 02 04
W.C. Dillon & Co. Inc. 02 03
Waugh Controls 02 04
Weed Instrument Company, Inc. 02
Wer Canada 01 02
West Instrument 02 04
West Way 07
Westcan Electrical Mfg. 01
Westinghouse Canada 01 02 07
Westinghouse Vectrol 01 02
Wilcorp Mfg. 01 04
Willer Engineering 01 02 04 06
Wiramold Canada 01 04
Wylain Canada 01
York Instruments 02
Zenith Controls 01
Zimpro Hydro Clear 04

Meters and Recorders

01 Ammeters
02 Amp-hour meters
03 Anemometers
04 Calorimeters
05 Combustion
06 Electrical meters
07 Flowmeters
08 Gas meters
09 Humidity
10 Hydrometers
11 Hygrometers
12 Kilovar meters
13 Kilovar demand meters
14 Kilowatt meters
15 Kilowatt demand meters
16 Kilowatthour meters
17 Light meters
18 Multimeters
19 Power factor meters
20 Potentiometers
21 Pressure gauges
22 Pyranometers
23 Steam leaks
24 Steam meters
25 Tachometers
26 Thermometers
27 Vibration meters
28 Viscosimeters
29 Volt meters
30 Water meters
31 pH

ADMIC Controls 02 15 26
ASEA Ltd. 01 20 25 29
Aeroquip (Canada) Inc. 07
Airflow Developments (Cda) Ltd. 03 11 25 26
Alexander D. Smart Ltd. 09 11 21 23 26 27
Ametek, Inc., Thermox Instruments Div. 05
Amprobe Instrument 01 06 12 14 18 19 26 29
Analygas Systems Ltd. 05 09
Analytical Measurements of Canada Ltd. 31
Associated Research, Inc. 29
Aviation Electric Ltd. 09 20
BBC Brown Boveri Canada Inc. 04 07 09 21 24
Bach-Simpson Ltd. 29 01 06 17 18 25
Bailey Controls 05
Baker Instruments Limited 03 07 09 11 21 25 26
Beckman Instruments Inc. 05 09 11 19
Beel Controls Limited 25
Bently Nevada Corp. 25 27
Blenkhorn & Sawle Limited 27
Bristol of Canada 01 07 09 21 26 29
Brooks Instrument Div. 07 24 30
Caltrol 04 07 09 11
Canada Valve Inc. 30
Canadian General Electric 01 02 05 06 07 12 14 15 16 19 25 27 28 29
Capital Controls 07 20
Chemiquip Canada Inc. 21
Comalco Ltd. 02 04 06 07 14 15 16 30
Comeau Technique Ltd. 07 10 11 17 19 20 25 26 28
Conserval Engineering Inc. 16
Contric Automation Ltd. 14 15
Control Devices 06 30
Conval Equipment 07 21 26
Criterion Instruments Ltd. 01 04 06 12 14 17 19 29
Crompton Instruments Ltd. 01 06 12 14 19 25 29
Datron Systems Inc. 23
Dresser Canada Inc. 08 21 26
Duncan Instruments Ltd. 01 02 03 06 12 14 16 17 18 19 20 25 26 27 29
Dwyer Instruments Inc. 03 07 21
ERDCO Engineering Corp. 07
Electromatic Components Ltd. 01 03 06 21 25 26 29
Empire Controls 13 14 15 16 26
Energy Management Corp. 09 14 15 15 21 26
Energy Management Systems 01 02 03 04 05 06 07 08 09 10 11 14 15 16 17 18 19 20 21 22 24 26 29 30
Energy Systems Company 16
Energy Systems Inc. 05
Ernst Gage Co. 21 26
Escodyne Ltd. 09 21 23
Esterline Angus Instrument Corp 01 02 12 13 14 15 16 18 19 26 29 30
Extech Systems 03 05 09 11 25 26
FE Myers Can. Ltd. 21
Fielding Crossman & Assoc. Ltd. 01 02 07 08 24 30
Fischer & Porter (Canada) Ltd. 07
Fluid Data Inc. 04
Foxboro Canada Inc. 07
Furneco Industrial Supplies & Instr. Co. Ltd. 01 07 21 25 26 29 30
GTE Products Corp. 06
Gen-Tec Inc. 06 12 13 14 15 16 19 20 29
General Scientific Equipment Co. 10 11 26
Graham Company 26
Guildline Instruments Limited 20 26 29
H W Cowan Canada Ltd. 17 18
H.O. Trerice 21 26
H.O.P. Consulab Inc. 01 02 06 12 13 14 15 16 19 20 29
HCP Industrial Sales 25
Hankison Corp. 09
Hewlett Packard Canada Ltd. 06 18 26 29
Hoke Controls Ltd. 07 08 30
Honeywell Braukmann Inc. 02 21 26
Hy-Cal Engineering 04 09 22 26
IRD Mechanalysis Limited 27
Inproheat Industries Inc. 05
Industronics Inc. 05
Inficon Systems Ltd. 26 05 09 11 25
Infrascan Inc. 22 28
Instruments Champagne Int'l. 01 03 04 06 07 09 10 11 18 20 21 26 28 29
Intertechnology Limited 07 09 21 26
John C. Ernst Co. 07 21 26
Johnson Controls Ltd. 21
Kahlsico Int'nl. Corp. 03
Kahn and Company 11
Kaigio Electronics Co. Inc. 17
L-K Metal Products Co. Ltd. 01
Land Instruments Inc. 26
Leeds & Northrup Canada 01 05 06 07 09 12 13 14 15 16 19 20 29
Leonard Electric (1981) Limited 25
Leslie International 28
Level Electronics Ltd. 06 18 29
Liquitrol Ltd. 21 26
Lisle-Metrix Ltd. 01 06 09 29
MCC Powers 09
MacDonald Process Equipment Ltd. 06 07 20 24 25 26
MacLeod & Grant Ltd. 05 23
Makinson Winchester Inc. 23
Manning Technologies Inc. 07
Margaux Controls Canada Inc. 17
Markko Construction 07
Markland Specialty Engineering Ltd. 07 28
Marsh Instrument Canada 21 26
Material Control, Inc. 14 15 16 25 26
Matheson 07 21
Maxon Corporation 07
Meriam Instrument 07 21
Mesam Limited 21 25
Metex Corporation Ltd. 07
Micronet Limited 14 15 16
Mikron Instrument Co. 26
Milton Roy Industries Ltd. 05 21
Multi-Amp Corp. 01 06 29
Neptune Meters 07 08 28 30
Newport Electronics 01 07 18 20 21 25 26 29
North American Mfg. Co. 05 07 21
Ohio Semitronics 02 14 16 19
Olman Instruments 01 06 17 18 19 26 27 29
Ontor 05 08 09 10
Ordan Thermal Products 02 05 07 08 14 15 16 19 21
PCB Piezotronics 27
PMC/Beta Corporation 27
Pacer Industries 01 06 09 11 17 18 25 26 29
Palmer Instruments 10 11 21 26
Paschal Instruments Inc. 29
Prelco Electronics Ltd. 01 06 18 29
Preso Industries 07 08 24
Presto Tek 26 30
Promac Controls Inc. 07
RCC Electronics 01 06 17 18 19 25 29
Resource Interface 06 17
Reuter-Stokes Canada 03 09
Rexanne Products 18 22 25 26
Rockwell International of Canada 08 30
Rosemount Analytical 07
S.L. Watkins & Assoc. 23
Sentry Equipment 30
Serfilco 02
Shortridge Instruments 07
Singer Company of Canada 07 08 21 30
Sirco Products 07
Soget 07
Solidyne 14 15
Sommers Motor General or Sales 01 02 06 14 15 16 19 25 29
Standard Equipment Co. 04 22 23 26
Takelak 26
Tel-Tru Manufacturing 26
The Electric Tachometer Corp. 01 06 08 11 25 26 29
Thermal Energy Devices 26
Thermax Canada 01 29
Thermo Electric (Canada) 20 26
Transmation Canada 01 06 10 11 16 17 18 19 25 29
Uehling Instrument 21
United Electric Controls (Canada) 20 21 26
Utility & Industrial Supply 07 21
Valera Electronics 26
Vallance Brown 01 06 18 25 29 30
Veeder-Root of Canada 07 08 25 30
Veronics Instruments 07 09 11
Vibron 27
Vitec 27
Viz Manu. 01 18 29
Wahl International 26
Water Refining 30
Weed Instrument Company, Inc. 26
Weiss Instruments 21 26
West Instrument 01 07 24 26
Westinghouse Canada 01 02 05 06 07 12 13 14 15 21 29
Wilgood 04 07 24 30
Willer Engineering 03 05 07 09 11 21 25 26
Winter's Thermogauges 10 11 21 26
York Instruments 09 11 20 25 26 29
Zero-Max 25

Product listings

Monitors

01 Combustion
02 Electrical load
03 Steam leaks

AMF/Paragon Electric Division 02
Alexander D. Smart Ltd. 03
Analygas Systems Ltd. 01
Automatic Controls Systems 02
Beckman Instruments, Inc. 01
Cleveland Controls Inc. 01
Comalco Ltd. 02
Conserval Engineering Inc. 01 02
Control Devices 02
Douglas Power Equipt. Ltd. 02
E.A. Electric 02
ERDCO Engineering Corp. 01
Electromatic Components Ltd. 02
Empire Controls 02
Energy Management Corp. 02
Energy Systems Inc. 01
Extech Systems 01
Gen-Tec Inc. 02
H.O.P. Consulab Inc. 02
Hewlett Packard Canada Ltd. 01 02
Honeywell Ltd. 02
Industronics Inc. 01
Inficon Systems Ltd. 01
Inproheat Industries 01
Johnson Controls Ltd. 02
Leeds & Northrup Canada 01 02
Margaux Controls Canada Inc. 02
Micronet Limited 02
Milton Roy Industries Ltd. 01
Modudata Systems Ltd. 02
North American Mfg. Co. 01
Olman Instruments 02
Ordan Thermal Products 01 02
P.S.C. Controls 02
Pacer Industries 02
Pro Controls 02
Rantach Electronics 02
S.L. Watkins & Assoc. 03
Scientific-Atlanta 02
Solidyne 02
Synerco Systems For Energy Conservation 02
Teledyne Analytical Instr. 01
Tervcon 01
The Electric Tachometer Corp. 02
Thermex Canada 02
Thermolec 02
Thermolec Ltd. 02
Time Mark 02
U.E. Systems 03
Wahl International 03
Westinghouse Canada 01 02
Willer Engineering 01

Sensors

01 Carbon dioxide
02 Carbon monoxide

Acme Engineering Prod. Ltd. 01 02
Analygas Systems Ltd. 01 02
Beckman Instruments, Inc. 01 02
Canadian Applied Technology 02
Conserval Engineering Inc. 02
Corning Glass Works 01
Energy Management Corp. 01
Energy Management Systems 01 02
Energy Systems Company 02
Enmet Canada Ltd. 02
Extech Systems 01 02
General Scientific Equipment Co. 02
Inficon Systems Ltd. 01 02
Levitt-Safety Limited 02
Matheson 01 02
Measurex Inc. 01 02
Ordan Thermal Products 01 02
Rosemount Analytical 01 02
Safety Supply Canada 02
Teledyne Analytical Instr. 01 02
Willer Engineering 01 02

Testing Equipment

01 Air tightness
02 Combustion
03 Electrical
04 Insulation
05 Steam trap

D.J. MacAulay & Assoc. 03
Can-an Instruments Ltd. 01 03 05
A-Tech Moisture Surveys 04
Airflow Developments (Cda) Ltd. 01
Alexander D. Smart Ltd. 05
Ametek, Inc., Thermox Instruments Div. 02
Analygas Systems Ltd. 02
Associated Research, Inc. 03 04
Bach-Simpson Ltd. 03 04
Baker Instruments Limited 01 02
Beckman Instruments, Inc. 02 04
Can-Am Air Leakage Control Systems 01
Centri-spray Corp. 01
Criterion Instruments Ltd. 03 04
Datron Systems Inc. 05
Duncan Instruments Ltd. 03
Dwyer Instruments Inc. 02
EEV Canada Ltd. 04
Empire Controls 03
Ener-Corp Management Limited 01
Escodyne Ltd. 05
Extech Systems 02
FTS Systems, Inc. 03
Furneco Industrial Supplies & Instr. Co. Ltd. 02
GTE Products Corp. 03
Gen-Tec Inc. 03
Guildline Instruments Limited 03
H W Cowan Canada Ltd. 03
Hewlett Packard Canada Ltd. 03 04
IDI Electric (Canada) Ltd. 03
Inficon Systems Ltd. 02 05
Infrascan Inc. 04 05
Leeds & Northrup Canada 03
Level Electronics Ltd. 03 04
Makinson Winchester Inc. 05
Metropolitan Refining Co. Inc. 02
Mikron Instrument Co. 05
Milton Roy Industries Ltd. 02
Multi-Amp Corp. 03 04
North American Mfg. Co. 02
Ohio Semitronics 03
Olman Instruments 03
Onter 02
Ordan Thermal Products 02 03 04
Pacer Industries 03 04
Paschal Instruments Inc. 03 04
Power/Mate Corp. 03
Promac Controls Inc. 03
RCC Electronics 03 04
P.F.L International 03
Roxanne Products 05
Rochester Instrument Systems 03
S.L. Watkins & Assoc. 01 05
Schlegel Canada 01
Standard Equipment Co. 01 04 05
Sugar Hut Hill Holdings 01 02 03 04 05
Tervcon 02
Thermal Energy Devices 04
Thermidaire Corp. (1974) 05
Toyoda America 05
Transmation Canada 03
U.E. Systems 05
Utility & Industrial Supply 05
Wahl International 05
Westinghouse Canada 02 03
Willer Engineering 02

Thermographic Equipment

AGAtronics Ltd.
Airflow Developments (Cda) Ltd.
Baker Instruments Limited
Infrascan Inc.
Standard Equipment Co.
Sugar Hut Hill Holdings
Thermal Energy Devices
Wahl International
Willer Engineering

Timers

01 Electronic
02 Mechanical
03 Portable

D.J. MacAulay & Assoc. 01 02 03
ADMIC Controls 01
AMF/Paragon Electric Division 01
ASEA Ltd. 01
American Stabilis, Inc. 01
Anbak Sales Canada Ltd. 01
Canadian General Electric 01 02
Comeau Technique Ltd. 01
Conserval Engineering Inc. 01 02
Contric Automation Ltd. 01
Electromatic Components Ltd. 01
Energy Management Corp. 01 02
Gen-Tec Inc. 01
Hewlett Packard Canada Ltd. 01
Honeywell Braukmann Inc. 01 02
Instrumentation & Control Systems Inc.
Instruments Champagne Int'l. 01 03
Intralec 01 02
Isolation Systems 01
Klockner Moeller Ltd. 01
Lisle-Metrix Ltd. 01 02
M.H. Rhodes 02 03
Multi-Amp Corp. 01 03
Newport Electronics 01
Olman Instruments 02
Promac Controls Inc. 01
Siemens Electric 01 02
Simplex Int'l Time Eq. 01
Solar Centre 02
Synerco Systems For Energy Conservation 01 02
Texas Instruments 01
The Electric Tachometer Corp. 01 03
Trimax Controls 01
Valera Electronics 01
Veeder-Root of Canada 01 02
Wahl International 03
Westinghouse Canada 01

Compressors & Turbines

Compressor types

Air compressors, which are widely used in industrial plants are significant energy users at approximately 5 to 6 kW per cubic metre per minute (20 to 25 hp per cfm). There are two general types in common use, *reciprocating and rotary*.

Match capacity to demand

Compressor capacity must be matched to demand, and the first step is to analyse pressure requirements in the system. Compressor controls should then be set to provide the lowest pressure possible to meet those requirements. Existing pipe systems should be examined to ensure the additional system add-ons over the years have not caused excessive pressure drops.

Base loading

Multiple compressor plants should arrange to base load as many units as possible, leaving one unit to load-unload or modulate to meet changing requirements. As volume demand lowers, units should be shut down after an established unload time and not be allowed to run on unloaded. *Control system packages* are available to accomplish this automatically. They can also be programmed to consider the relative efficiencies of various compressor units.

If there is a relatively small high pressure requirement within a system, this can be satisfied with a local compressor if it will help to lower the total system pressure significantly. A separate instrument air system, if free of oil and moisture can increase energy savings and, at the same time, increase system performance.

Usually, the separate system can be operated at a lower pressure and it may allow the main system to be shut down when only instrument air is required.

At part load, rotary screw compressors are usually not as efficient as reciprocating compressors, and should either be fully loaded or shut down.

Leaks

Compressed air leaks should not be overlooked as they are a major cause of wasted energy.

Heat recovery

Compressors generate a lot of heat which can be recovered and used elsewhere. Various *systems* are available *to recover heat* from air-cooled compressors. Preheated air from the compressor can be made available for space heating, combustion makeup and drying. Heat recovery from water-cooled compressors is easily achieved with piping changes organised to put the preheated water to use elsewhere in the building.

Turbines, steam and gas

Turbines are used in *cogeneration* to create a total energy system which involves the simultaneous production of electricity (for shaft power) and process or space heat, from the same energy source.

Steam turbine systems have the advantage of being able to burn almost any

fuel. They are efficient at part-load and can operate on a wide range of steam pressures. They do, however, require a large powerhouse and higher steam pressures than are normal for industrial process uses. They are available in two main types: back pressure, and single or double extraction condensing turbines.

Gas turbines are usually factory assembled and delivered to the site as a complete package ready to be connected to the fuel supply, the electrical distribution system, and to heat-using equipment or processes.

All cogeneration systems are economically viable only where electricity and heat from them can be effectively used or sold.

Product listings

Compressors

01 High efficiency
(Supplier will specify efficiency)
02 Modifications for improved efficiency
03 Booster systems (air cooled)

APE Canada Inc. 01
Haskel Inc. 03
Ingersoll-Rand Canada Inc. 01 02
Kahn and Company 01
Siemens Electric 01
Sihi Pumps 01
Solar Turbines Canada 01
Valv-All Canada 01

Turbines

01 High efficiency turbines
02 Modifications for improved efficiency

ASEA Ltd. 01
BBC Brown Boveri Canada Inc. 01
Canadian Schack Ltd. 02
Haskel Inc. 00
Hayward Tyler 01
Ingersoll-Rand Canada Inc. 01 02
John Brown Engineering 01
Prochem 01
Siemens Electric 01
Sihi Pumps 01
Solar Turbines Canada 01 02
Westinghouse Canada 01 02
Worthington 01

Water Resource Management

Transporter of energy

Water is a major resource in industrial plants and in the heating and cooling systems of all types of buildings. It is the most common vehicle for the transport of energy within most process plants. The conservation of this resource, and its *treatment* to ensure maximum ability to continue transporting energy are critical to any energy conservation program.

There are four major considerations: influent, *feedwater* used in boilers, *cooling tower water*, and *effluent*.

Influent treatment

For influent water, some of the factors to consider are: water quality requirements; fluctuations in quality; *optimum pH; temperature and flow variations; sludge disposal; clarification equipment and chemical feed systems*.

Boilers

A plant's water/steam balance is critical, and a diagram should be prepared which shows relative cost of treatment, pumping and heating. *Condensate recovery* is a major water energy conservation factor. Boiler protection is essential to maximise energy output from the boiler system, to assure efficient transfer of that energy, and to make every pound of chemical used pay for itself in more energy and lower operating costs.

Cooling and wastewater

Cooling water and wastewater reuse should be considered together since they involve an examination of alternatives to current disposal practices.

Effluent

Many plants use purchased water for cooling purposes, and in some locations, pay again for the disposal of this water into a sewage system. In such situations, cooling towers very often will be more economical than a once-through cooling system. They consist of a *spray pond*, natural draft towers and *mechanical draft towers*. The latter represent the most common and have become highly sophisticated.

Dissipation of waste heat through the use of cooling towers is often very expensive. In many cases it is more cost effective to recover waste heat directly for use in other plant processes. This approach may provide a low-cost energy source as well as reducing loads on cooling systems.

Commercial and institutional use

In commercial and institutional buildings there are many ways to conserve energy through saving water being used as the transporter of energy. Some common methods are the use of:

(a) *restricted flow showerheads and faucets*, which limit the flow of heated domestic hot water;
(b) limited quantity faucets which allow only a certain volume of water per usage;
(c) *electronic water heaters* (point-of-use) which heat only a small quantity of water sufficient for the task, e.g. handwashing.

Conservation of water is also being achieved by *limited flush toilets* which have a reduced quantity of flush water, and by manual flush systems in public washrooms which only flush when users operate the system, rather than a regular frequent flush of all urinals.

Product listings

Water Resource Management

01 Pumping station monitoring and control
02 Activated carbons — for potable water
03 Computerized urinal flush control
04 Cooling towers (energy efficient)
05 Closed circuit coolers
06 Industrial water filters
07 Industrial water separators
08 Water treatment
09 Centrifugal pumps
10 General
11 Pressure vessels
12 Disposable cartridges
13 Liquid level systems
14 Water saving showerheads
15 Water saving toilets
16 Faucet flow restrictors
17 Instant waterheaters

ADMIC Controls 01
Atkemix Inc. 02
Automatic Controls Systems 03
Baltimore Aircoil of Canada 01 04 05 06 07
Betz Inc. 08
Bristol Aerospace Ltd. 10
Buckman Laboratories of Canada Ltd. 08
Canadian Applied Technology 01
Control Devices 01
Culligan of Canada 08
Filterite/Brunswick Tech. Div. 11 12
Great North Conservation Products Inc. 16
Illinois Water Treatment Company 08
International Water Saver Inc. 15
Liquiflame 08 06
Peel Energy Management 14 15 16
Progressive Equipment 01
Rada Mechanical Products 01
Resources Conservation Co. 10
Rock Master 10
Schramm 8 10
Skan-A-Matic 13
Star Systems 06 07 08 10
Water Conditioning Canada 06 08 10
Water Refining 06 08 10
Wetcom Engineering 08
Wilcorp Mfg. 17
Wilgood 10

Suppliers of Energy Conservation Products

A

A-Tech Moisture Surveys P.O. Box 105 Manotick Ontario K0A 2N0 (613) 692-2166 Branches: P.O. Box 3662 Halifax Nova Scotia B3J 3K6 (902) 429-9632 400 Bute Street St. Lambert Quebec J4R 2M2 (514) 671-1250 6879 Shelter Bay Road, Unit 70 Mississauga Ontario L5N 2A2 (416) 821-3015 1918 Wyandotte Street East Windsor Ontario N8Y 1E4 (519) 252-8051 851 Lagimodiere Blvd. Winnipeg Manitoba R2J 3K4 (204) 247-5744

A.W. Cash Valve Mfg. Corp. 666 E. Wabash Decature IL, USA 62525 (217) 422-8574 Representatives: **Tom Donaldson Co. Ltd.** 20 East 4th Ave. Vancouver B.C. V5T 1E8 (604) 873-4628 **Lytle Engineering Specialties** 6445 De Maisonneuve Blvd., West Montreal Quebec H4B 2Z1 (514) 487-7820

AAF-Ltd. 400 Stinson Boulevard Montreal Quebec H4N 2G1 (514) 748-6931 Branches: 6 Heritage Drive S.E., #L4 Calgary Alberta T2H 2B8 387 Princess Avenue London Ontario N6B 2A7 55 Chandler Crescent Moncton New Brunswick E1E 3W6 5445 Henri Bourassa Blvd. West Montreal Quebec H4R 1B7 34 Grenfell Crescent Ottawa Ontario K2G 0G2 2700, boul. Laurier, #511 Québec Québec G1V 2L8 215 Milvan Drive Toronto Ontario M9L 2A3 1810 Alberni Street Vancouver British Columbia V6G 2L6 1122 Wall Street Winnipeg Manitoba R3E 2R9 **Agents: M & M Engineering Limited** Halifax Nova Scotia **Heating Products Limited** St. John's Newfoundland **Kemo Products Limited** Thunder Bay Ontario

Abisko Mfg. Inc. 4 Buckingham Street Toronto Ontario M8Y 2W1 (416) 259-3264

Accessible Products Company 2122 West 5th Place Tempe AZ 85281-9990 (602) 967-8888 **Representative: J. Douglas Smith** 1310 Echo Road Sarnia Ontario N7S 3K3 (519) 542-7311

Acme Engineering Prod. Ltd. 5706 Royalmount Avenue Montreal Quebec H4P 1K5 (514) 342-5656

ACS-Hovac 935 N Lively Woodale Ill. 60291 (312) 860-6860

Acwil Insulations Limited 80 Signet Drive Weston Ontario M9L 1T2 (416) 741-7311

Adalet-PLM 4801 West 150th St. Cleveland Ohio 44135 (216) 267-9000 Branches: **Iberville Div.** 100 Longtin Saint-Jean Quebec J3B 3G5 (514) 347-2304 **GTE Sylvania Ltd. Leonard Elec. Ltd.** 1008 Rangeview Rd. Mississauga Ontario L5E 1H3 (416) 274-3454

ADMIC Controls 2-33 Glencameron Rd. Thornhill Ontario L3T 1N9 (416) 881-4112

ADT Energy Systems Ltd. 5734 Yonge St. Willowdale Ontario M2M 3T3 (416) 226-9221

Aero Environmental Limited 37 Hanna Avenue Toronto Ontario M6K 1X2 (416) 366-7431

Aerofin Corp. (Canada) Ltd. Hebert St. Gananoque Ontario (613) 382-3535 Branches: 7493 Trans Canada Hiway Suite 104 Ville St Laurant H4Y 1T3 (514) 336-8344 85 Ellesmere Rd. #208 Scarborough Ontario M1R 488 (416) 449-2811

Aeroquip (Canada) Inc. 287 Bridgeland Ave. Toronto Ontario M6A 1Z7 (416) 781-5261

Aerovent Inc. 1 Aerovent Drive Piqua Ohio 45356 (513) 773-4611 Branch: Powlesland Engrg. Ltd. 23 Westmore Dr. Su. 400 Rexdale Ontario M9V 3Y7 (416) 745-0311

AGAtronics Ltd. 5230 South Service Rd., Ste. 125 Burlington Ontario L7L 5K2 (416) 637-5696

Ainsworth Electric 131 Bermondsey Road Toronto Ontario M4A 1X4 (416) 751-4420

Air Changer Company Ltd. 334 King Street East, Suite 505 Toronto Ontario M5A 1K8 (416) 863-1792

Air Economy Corp. P.O. Box 29 Flemington N.J. 08822 (201) 782-8868

Airflow Developments (Cda) Ltd. 1281 Matheson Blvd. Mississauga Ont. L4W 1R1 (416) 624-2133 TELEX 06-960332

Airtechni Inc. 9200 Charles de Latour Montreal P.Q. H4N 1M2 (514) 336-3399

Alberta Industrial Development Ltd. 704 Cambridge Bldg. Edmonton Alberta T5J 1R9 (403) 429-4094

Albion 2195 Ekers Avenue Montreal Quebec H3S 1C7 (514) 731-3241 Branches: 32 Colville Road, Toronto Ontario M6M 2Y4 (416) 249-8533 2725 Lake City Way Burnaby B.C. V5A 2Z6 (604) 420-1124

Alcan Building Products P.O. Box 269 Toronto Dominion Centre Toronto M5K 1K1 (416) 366-7211 Branches: 620 Audley Blvd. Annacis Industrial Estate New Westminster B.C. (604) 526-0828 962 Laval Crescent Kamloops B.C. V2C 5P5 (604) 372-9317 2239 McGarrigle Road Nanaimo, B.C. V9S 4M5 (604) 758-2445 2695 Opie Crescent Prince George B.C. V2N 2K9 (604) 562-5541 675 Willow Park Road Kelowna B.C. V1X 5H9 (604) 765-3131 6680 Mirah Road R.R. 3 Victoria B.C. V8X 3X1 (604) 652-3901 3504 - 80th Ave. S.E. Calgary Alberta T2C 1J3 (403) 279-5536 7735 Wagner Road Edmonton Alberta T6E 5B1 (403) 465-5246 #3, 7819 - 50th Ave. Red Deer Alberta T4P 1M8 (403) 343-7275 Bay #1 805 56th St. E. Saskatoon Saskatchewan (306) 665-2611 120 McLevin Avenue Scarborough Ontario M1B 3E9 (416) 293-1981 750 Barmac Drive Weston Ontario M9L 2X8 (416) 745-6133 Highway 4 at 401 P.O. Box 1300 Lambeth Ontario N0L 1S0 (509) 652-3246 1110 Dearness Drive London Ontario N6E 1N9 (519) 681-2870 8 Cesar Avenue Ottawa Ontario K2G 0B2 (613) 226-1366 578 Falconbridge Rd. (P.O. Box 2370) R.R. 1 Sudbury Ontario P3A 4R7 (705) 560-0315 428 Millen Road Stoney Creek Ontario L8E 3N9 (416) 561-1424 379 Gage Avenue Kitchener Ontario (519) 744-8171 40 Bell Farm Units 2 & 3 Barrie Ontario L4M 5L3 (705) 737-1064 650 Victoria St. Building C, Units 14 & 15 Box 1136 Cobourg Ontario K9A 4W5 (416) 372-8734 1486 Church Avenue Winnipeg Manitoba R2X 1G4 (204) 633-8429 Branch Manager 9701 Louis H. Lafontaine Blvd. Ville d'Anjou Quebec H1J 2E6 9155 Charles-de-Latour Montreal Quebec H4N 1M3 (514) 384-0490 2565 rue Watt Parc Colbert Ste. Foy Quebec G1P 3T2 (418) 658-1204 2389 rue Hertel Sherbrooke Quebec J1J 2J1 (819) 567-6655 425 Edinburgh Drive Moncton N.B. E1E 2L2 (506) 855-0492 10 Ilsley Burnside Industrial Park Dartmouth N.S. B3B 1L3 (902) 466-7174

Alexander D. Smart Ltd. 351 Steelcase Rd. W. Unit #3, Markham Ontario L3R 4H9 (416) 474-0550 Representatives: 3300 Cavendish Blvd., Suite 150 Montreal Quebec H4B 2M8 (514) 481-1104 TELEX 055-66316 Suite 100, 620 - 67th Avenue S.W. Calgary Alta. T2V 0M2 (403) 255-0606 TELEX 03-824568 (Alegre) 444 Robson Street Vancouver B.C. V6B 2B5 (604) 879-3033 TELEX 04-507672

Alfa-Laval Ltd. 113 Park St. S. Peterborough Ont. K9J 3R8 (705) 745-5735 TELEX 06-962811 Branch: 7005 boul.Taschereau Brossard Que. J4Z 1A7 (514) 735-5161

All Glass Inc. 45 Esna Pk. Drive Markham Ontario L3R 1C9 (416) 475-3100

Allen-Bradley Canada Limited 135 Dundas Street Cambridge Ontario N1R 5X1 (519) 623-1810 Branches: 100 Windmill Road Dartmouth N.S. B3B 1L7 (902) 463-1180 & 463-1185 TELEX 019-31493 P.O. Box 306 Moncton New Brunswick E1C 8L4 (506) 386-5263 25 Carlton Drive Mount Pearl Nfld. A1N 2X4 (709) 368-1931 605 Marshall Avenue Dorval Quebec H9P 1E1 (514) 636-6220 TELEX 05-822517 795, Ave. St. Jean-Baptiste, Ste. 104 Les Saules Quebec G2E 5E8 (418) 871-5455 TELEX 051-31504 1277 avenue Coté, App. #161 (418) 545-6137 TELEX 051-36124 P.O. Box 8115 Ottawa Ontario K1G 3H6 (613) 728-3355 43A Lesmill Road Don Mills Ontario M3B 2T8 (416) 445-3740 TELEX 06-966-782 4346 Elmview Dr., P.O. Box 760 Hanmer Ontario P0M 1Y0 (705) 969-7655 3425 Harvester Road Burlington Ontario L7N 3N1 (416) 632-7711 TELEX 061-8851 135 Dundas Street Cambridge Ontario N1R 5X1 (519) 623-1810 & 653-4051 TELEX 069-59317 704 Fanshawe Park Road London Ontario N5X 2B9 (519) 672-9061 4080 E.C. Row Ave. East, Unit 11 Windsor Ontario N9A 6J3 (519) 944-1112 TELEX 064-77883 Unit 34, 1313 Border Street Winnipeg Manitoba R3H 0X4 (204) 633-3914 & 633-3915 TELEX 07-55331 813 Castlegreen Drive Thunder Bay Ontario P7A 7M2 (807) 767-8462 C11-6215 - 3rd

Suppliers

Street, S.E. Calgary Alberta T2H 2L2 (403) 253-1020 Telex 03-826512 202-11434 - 168 Street Edmonton Alberta T5M 3T9 (403) 451-2093 TELEX 037-41511 P.O. Box 7830 Saskatoon Saskatchewan S7K 4R5 (306) 242-2100 TELEX 074-2388 12 East Third Avenue Vancouver British Columbia V5T 1C3 (604) 879-8671 TELEX 04-53136

Allied Witan Co. 13805 Progress Parkway Cleveland Ohio 44133 (216) 237-9630 Distributors: Canadian Distributors **John Spotton Company Limited** 3211 Lenworth Drive Mississauga Ont. L4X 2G6 (416) 625-6400 TELEX 06-961109 **Cowper Company Limited** 677 7a/th Avenue LaChine Montreal H8S 3A1 (514) 637-6746 TELEX 05-821827

Alumicor Limited 180 Commander Blvd. Agincourt Ontario M1S 3C9 (416) 291-7135

American Coolair Corp P.O. Box 2300 Jacksonville Florida USA 32203 (904) 389-3646 Representatives: **Davie Environmental** 25 Kelfield St. Rexdale Ontario M9W 5A1 (416) 244-5586 **Airobec Inc.** C.P. 37 Station Jean-Talon Montreal Quebec H1S 2Z1 (514) 354-3114

American Stabilis, Inc. P.O. Box 1289, Industrial Park Lewiston ME 04240 (207) 784-9389 **Distributor: B.D. Wait Co., Ltd.** 430 Wyecroft Rd. Oakville Ontario L6K 2G9 (416) 844-3224

American Standard Industrial Prod. Div. One Blair Drive Bramalea Ont. L6T 2H4 (416) 457-2881 Branches: 327 Market Mall 4935-40th Ave. N.W. Calgary Alb. T3A 2N1 (403) 286-1771 655 Hodge St. Montreal Quebec H4N 2A3 (514) 747-7517 6537 Mississauga Rd. Mississauga Ontario L5N 1A6 (416) 821-2335

Ametek Inc. Schutte & Koerting 2233 State Road Cornwells Heights PA USA 19020 (215) 639-0900 Representatives: **B. Guthrie Engineering Co. Ltd.** 1381-3 Hastings Crescent S.E. Calgary Alberta T2G 4C8 (403) 287-2483 & 287-2484 TELEX 038-21763 **B. Guthrie Engineering Co. Ltd.** 5905-103rd Street Edmonton Alberta T6H 2H3 (403) 434-8461 TELEX 037-2613 **Axel Johnson Industries Ltd.** Process Equipment Division 1475 Boundary Road Vancouver British Columbia V5K 4V2 (604) 291-2341 TELEX 04-354532 **Brian Engineering Limited** 1746 St. James Street Winnipeg Manitoba R3H 0L3 (204) 632-5516 TELEX 07-55500 **Brian Engineering Limited** 99 Rocky Lake Drive Bedford Nova Scotia B4A 2T3 (902) 835-8322 TELEX 019-22874 **Brian Engineering Limited** 330 Manitou Drive Kitchener Ontario N2C 1L3 (519) 893-7474 TELEX 069-55234 **Brian Engineering Limited** 45 Shaft Road Rexdale (Toronto) Ontario M9W 4M3 (416) 248-0226 TELEX 06-989331 **Brian Engineering Limited** 880 Philip Street Sarnia Ontario N7T 1Z6 (519) 337-7591 TELEX 064-76143 **Brian Engineering Limited** 735 Harold Crescent Thunder Bay Ontario P7C 5H8 (807) 623-2155 TELEX 07-34689 **Brian Engineering Limited** 2445 Duncan Road Montreal Quebec H4P 2A2 (514) 735-1671 TELEX 055-60764 **B. Guthrie Engineering Co., Ltd.** 2231 Broad Street Regina Saskatchewan S4P 1Y7 (306) 352-2292 TELEX 071-2792 c/o TAS **B. Guthrie Engineering Co., Ltd.** P.O. Box 1720 Saskatoon Saskatchewan S7K 3S1 (306) 242-8295 TELEX 074-2731

Ametek, Inc., Thermox Instruments Div. 150 Freeport Road Pittsburgh PA 15238 (412) 828-9040 Representatives: **Galvanic Analytical Systems** P.O. Box 8550 Postal Station F Calgary Alberta T2J 2V6 (403) 253-6576 TELEX 03822667 G A S Cgy **F. Drexel Western Ltd.** 4084 McConnell Court Burnaby B.C. V5A 3N7 (604) 420-2443 TELEX 04-354852 **F. Drexel Western Ltd.** 1846 Quinn Street Prince George B.C. V2N 1X5 (604) 564-7807 TELEX 04-788612 **Willer Engineering Ltd.** 1179 Decarie Blvd. Ville St. Laurent Montreal Quebec H4L 3M8 (514) 748-6169 TELEX 05-825599 Willer Eng. Mtl. **Willer Engineering Ltd.** 422 Consumers Rd. Willowdale Ontario M2J 1P8 (416) 499-4421 TELEX 06-968816

AMF/Paragon Electric Division 52 Royal Rd. Guelph Ontario N1H 7H1 (519) 822-1576/Toronto 364-0053

Amprobe Instrument 630 Merrick Rd. P.O. Box 329 Lynbrook NY 11563 (516) 593-5600 **Representative: Atlas Electronics Ltd.** 50 Wingold Ave. Toronto Ontario M6B 1P7 (416) 789-7761

Analygas Systems Ltd. 215 Nantucket Blvd. Scarborough Ontario M1P 2P2 (416) 759-2241

Analytical Measurements of Canada Ltd. (416) 749-7179

Anbak Sales Canada Ltd. 3208 Lenworth Dr. Mississauga Ontario L4X 2G2 (416) 625-1061

Andover Controls Corp. York & Hauerhill Sts. Andover MA USA 01810 (617) 470-0555 Distributor: **Energy Management Systems** Unit 7B 1585 Britannia Rd. E. Mississauga Ontario L4W 1S5 (416) 677-8740

APE Canada Inc. 2333 Millrace Court - Unit 4 Mississauga Ontario L5N 1W2 (416) 821-1300

Appareils D'eclairage York 1320 Jules Poitras Blvd. Ville St. Laurent P.Q. H4N 1X7 (514) 334-7850

Appleton Electric Ltd. 750 Lawrence Street Cambridge Ontario N3H 2N1 (519) 653-2581 Branches: Halifax (902) 434-3229 Quebec City (418) 522-0643 Montreal (514) 937-0190 Cambridge (519) 653-2581 Toronto (416) 456-3925 Hamilton (416) 523-7033 Pager R-4728 London (519) 653-0368 Pager R-5166 Sudbury (705) 693-2066 Winnipeg (204) 772-2129 Edmonton (403) 452-8414 Calgary (403) 269-9373 Vancouver (604) 224-7395

Appropriate Technology Corp. P.O. Box 975 Brattleboro UT 05301 (802) 257-4501 **Distributor: Canadian Gem Instr.** 3060 Lakeshore Rd. W. Oakville Ontario (416) 827-6446

Armstrong International, Inc. 816 Maple Street Three Rivers MI 49093 U.S.A. 49093 (616) 273-1415 Representatives: **General Equipment Ltd.** Calgary Edmonton Vancouver Saskatoon Winnipeg **Preston, Phipps Equipment Ltd.** Dartmouth Toronto Sarnia Ottawa **Preston, Phipps Inc.** Montreal Ste. Foy

Arthur S. Leitch Company Ltd. 999 William Street Midland Ontario L4R 4L7 (705) 526-5496 Branch: c/o Conval Quebec Incorporated 3115 Rue Sartelon St. Laurent P.Q. H4R 1E7 (514) 332-2301 **Agents: Kemo Products Limited** P.O. Box 266, Station "F" 611 Squier Street Thunder Bay Ontario P7C 4V8 (807) 344-6657 TELEX 073-4356 **E.D. Brown & Associates** 204 Starlite Building 7071 Bayers Road Halifax Nova Scotia. B3L 2C2 (902) 455-8294 TELEX 019-21847 **J.F. Taylor Enterprises Limited** P.O. Box 3389, Station "B" 380 Ridge Row St. John New Brunswick E2M 3Z9 (506) 672-3216 TELEX 014-47494 **Pompes Industrielles St-Foy Inc.** 1792 Boulevard Hamel Duberger Quebec G1N 3Z2 (418) 681-7301 TELEX 051-31741 **Hugh J. O'Neill Company Limited** Box 1270 34 Elm Street South Timmins Ontario P4N 7J7 (705) 264-2337 TELEX 027-77137 **3080 Jarrow Avenue** Mississauga Ontario L4X 2C7 (416) 625-3551 TELEX 06-961163) **38 Cramer Drive** Nepean Ontario K2H 5X5 (613) 828-3733 TELEX 053-4588 Representatives: **Bruce St. C. Patrick Ltd.** 2490 Blenheim Street Vancouver B.C. V6K 4K3 (604) 731-6596 TELEX 04-54345 **Kehoe Equipment Limited** 10571-114th Street Edmonton Alberta T5I 2P1 (403) 420-0040 TELEX 037-43267 **BO Corp Supply Limited** 7058 D Farrell Road S.E. Calgary Alberta T2H 0T2 (403) 252-4274 **H.F. Clarke Limited** 1426 Erin Street Winnipeg Manitoba R3E 2S8 (204) 772-2584

ASCOLECTRIC Limited Airport Road, P.O. Box 160 Brantford Ontario N3T 5M8 (519) 756-5287 or 364-2838 (Toronto Line) Branches: 160-6450 Roberts Street Burnaby B.C. V5G 4E1 (604) 294-1767 TELEX 043-56751 4208-12th Street, N.E. Calgary Alberta T2E 6K9 (403) 276-4459 TELEX 038-22787 10458 Mayfield Road, Suite 201 Edmonton Alberta T5P 4P4 (403) 483-5126 6537 Mississauga Road Mississauga Ontario L5N 1A6 (416) 821-2711 TELEX 061-81149 5500 Vanden Abeele Ville St. Laurent Montreal Quebec H4S 1P9 (514) 337-8520 TELEX 05-824006 P.O. Box 2548 Dartmouth East Post Office Dartmouth Nova Scotia B2W 4R7 (902) 434-2127 TELEX 019-22870

ASEA Ltd. 10,300 Henri-Bourassa West Saint-Laurent, Quebec H4S 1N6 (514) 332-5350

Associated Research, Inc. 8221 N. Kimball Ave. Skokie Ill. 60076 (312) 647-7850 **Agent: Brunelle Instruments, Inc.** 826 Belvedere Sherbrooke Quebec J1H 4B8 (819) 569-1406

Aston Industries Inc. C.P. 220 St-Leonard d'Aston Quebec J0C 1M0 (819) 399-2175

Aston Ziehl Motors Inc. 50, Courchesne, C.P. 220 St-Leonard d'Aston Quebec J0C 1M0 (819) 399-2611

Atkemix Inc. P.O. Box 1065 Brantford Ont. N3T 5T2 (519) 756-6181 & (416) 822-3630

Atlas Engineering & Machine Co. Ltd. 16 Eastern Ave. Toronto Ont. M5A 1H4 (416) 368-3003 Branches: 245 Baig Blvd., P.O. Box 942 Moncton New Brunswick E1E 1E1 (506) 388-4204 1184 Sanford St., P.O. Box 1662 Winnipeg Man. R3C 2Z6 (204) 786-6687 2569 De Minial St. St. Laurent Quebec H4S 1E5 (514) 332-4824 3143 Thunderbird Cres. Burnaby B.C. V5A 3G1 (604) 937-7705

Atlas Polar Company Limited P.O. Box 160, Stn. 'O' Toronto Ontario M4A 2N3 (416) 751-7740

Autocon Industries, Inc. 2300 Berkshire Lane No. Minneapolis MN 55441 (612) 553-4818 Representatives: **Crescent Control Ltd.** 2960 West 4th Ave. Vancouver B.C. V6K 1R4 (604) 732-7461 **Telcon Controls Ltd.** 12 Lockport Ave. Toronto Ont. M8Z 2R7 (416) 239-3167

Automatic Controls Systems 8 Melanie Dr. Brampton Ontario L6T 4L2 (416) 791-1020

Automation Industries (Can) Ltd. 6860 Rexwood Rd. Mississauga Ont. L4V 1L8 (416) 678-9383

Aviation Electric Ltd. P.O. Box 2140 St. Laurent Quebec H4L 4X8 (514) 744-2811

Aztec Canada Ltd. 5678 Production Way Langley B.C. V3A 1N4 534-6575

B

B.E.S. Energy Equipment 553 Industrial Blvd. St. Eustache P.Q. J7R 5R3 (514) 472-1035

Babcock & Wilcox Refractories 1185 Walkers Line North Burlington Ontario L7M 1L1 (416) 335-3414 Branches: 207 Brunswick Blvd. Pointe Claire Quebec H9R 1A5 (514) 875-7080 10508-169th Street Edmonton Alberta T5P 3X6 (403) 483-4507

Bach-Simpson Ltd. 1255 Brydges St. London Ontario NAW 2C2 (519) 452-3200 Branches: 415 Oakdale Rd., Suite 243 Downsview (416) 742-5151/2 Ottawa (613) 829-3828 5585 Monkland Ave., Suite 100 Montreal (514) 489-4966 TELEX 055-66341

Bacharach Instrument Company 301 Alpha Dr. Pittsburgh PA. 15238 (412) 782-3500 Distributors: **Canadian General Filters** 39 Crockford Blvd. Scarboro Ontario (416) 757-3691 **Fisher Scientific Ltd.** P.O. Box 9200 Terminal Ottawa Ontario K1G 4A9 (613) 225-6752

Bailey Controls 860 Harrington Court Burlington Ontario L7N 3N4 (416) 639-8840 Branches: 880 Hanwell Road Fredericton New Brunswick E3B 6A3 (506) 454-2400 2745 Dutch Village Road, Suite 209 Halifax Nova Scotia B3L 4G7 (902) 455-0574 209 Brunswick Blvd. Pointe Claire (Montreal) Quebec H9R 1A5 (514) 694-5610 1499 Ave. Boivin Ancienne-Lorette Quebec G2E 4R1 (418) 871-2850 750 Gordon Baker Road Willowdale (Toronto) Ontario M2H 3B4 (416) 493-6803 1030 Upper James Street, Suite 302 Hamilton Ontario L9C 6X6 (416) 388-6720 39 Leacock Way Kanata (Ottawa) K2K 1T1 (613) 592-1278 5720 MacLeod Trail South, Suite 214 Calgary Alberta T2H 0J8 (403) 253-0271 10508-169 Street Edmonton Alberta T5P 3X6 (403) 483-4709 4050 Gravely Street, Suite 203 Burnaby (Vancouver) V5C 3T6 (604) 299-5749 3501-8th Street East Saskatoon Saskatchewan S7H 0W6 (306) 373-5444

Baker Instruments Limited 118 Doncaster Ave. Thornhill Ontario L3T 1L3 889-8642

Baldor Electric Co. Fort Smith Arkansas 72902 (501) 646-4711 Branches: Dryden Agencies, Ltd. 7228-76th Avenue Edmonton Alberta T6B 0B2 (403) 465-9594 TELEX 037-3454 **Canadien Electro Drives, Ltd.** 2242 Alpha Avenue Vancouver (Burnaby) British Columbia V5C 5L6 TELEX 04-354718 **Circole-Tronic** 1844 William Street Montreal Quebec H3J 1R5 (514) 933-2711 TELEX 05-267355 **Industrial Agencies Ltd.** 301-310 Donald Street Winnipeg Manitoba R3B 2H4 (204) 942-5205 TELEX 07-55265 **John G. Rubino, Inc.** 6551 Mississauga Rd. Mississauga Ontario L5N 1A6 (416) 821-0944

Bally Refrigeration of Canada Box 696, 1365 California Ave. Brockville Ont. K6V 5V8 (613) 342-6115

Baltimore Aircoil of Canada 35 Sinclair Ave. Georgetown Ont. L7G 1J3 (416) 877-8272 Representatives: **H.E. Rieckelman (Canada) Ltd.** 2104 Bromsgrove Road Mississauga Ontario L5J 1L4 (416) 823-9440 **Aquavap Equipment Ltd.** 1485 Begin Street Ville St Laurent Quebec H4R 1V8 (514) 332-3120 TELEX 05-824505 **R.R. Burns Sales Limited** #1A 6020-11th Street S.E. Calgary Alberta T2H 2G1 (403) 252-0113 **G.R. Hudson Sales Limited** P.O. Box 94305 Richmond B.C. V6Y 2A6 (604) 271-8585 **Airmaster Sales Limited** 400 Keewatin Street Winnipeg Manitoba R3E 3E9 (204) 633-5756 TELEX 07-587765 **Vortec Engineering Sales Limited** Sub 31 12-3012 Louise Street Saskatoon Saskatchewan S7J 3L8 (306) 373-3310 TELEX 07-42446

Banvil Limited 775 Main Street East Milton Ontario L9T 3Z3 (416) 878-8181 Branches: Vancouver (604) 941-9491-2 Winnipeg (204) 633-9345 Montreal (514) 327-3783

Barber Industries P.O. Box 5280 Stn. 'A' 9625 Shepard Road S.E. Calgary Alberta T2H 2P3 (403) 279-7511 TELEX 038-25721

Barber-Colman of Canada Ltd. 1875 Wilson Ave. Weston Ontario M9M 1A4 742-6210

Bard Manufacturing Co. P.O. Box 607 Bryan Ohio. 43506 (419) 636-1194 Branch: Heat Pumps of Canada P.O. Box 2045 Brantford Ontario N3T 5W5 (519) 756-2880

Barnes and Somes Inc. 34 Crafts St., P.O. Box 155 Newtonville Ma. 02160 (617) 332-7100 Representatives: **H.F. Clarke Ltd.** 5220 1A St., P.O. Box 5662 St. A. Calgary Alberta T2H 2Y2 (403) 255-0186 **B & C Services** 1435 Queens St. East Toronto Ontario M4L 1E2 (416) 691-3977

Basco Division 2777 Walden Ave. Buffalo New York 144225 (716) 684-6700 Distributor: **McRae Engineering Equip Ltd.** 2 Thorncliffe Park Dr. Toronto Ontario M4H 1H2 (416) 422-3735

BBC Brown Boveri Canada Inc. 2260 Place du Canada Montreal Quebec H3B 2N2 (514) 875-7140 Branches: 2260 Place du Canada Montreal Quebec H3B 2N2 (514) 875-7140 130 Bloor Street West Toronto Ontario M5S 1N6 (416) 967-4420 255-5th Avenue S.W. Calgary Alberta T2P 3G6 (403) 233-2755 14315-118th Avenue Edmonton Alberta T5L 4S6 (403) 453-6902 10451 Shellbridge Way Richmond B.C. V6S 2X3 (604) 278-4501 4000 Trans-Canada Hwy Pointe Clair Quebec H9R 1B2 (514) 697-6210

Beckman Instruments, Inc. PICG 2500 Harbor Blvd. Fullerton California 92634 (714) 871-4848 Branches: 6465 Northam Drive Malton Ontario L4V 1J2 (416) 677-1164 4220-23rd St., N.E., Bay #9 Calgary Alberta 2TE 5Y9 (403) 276-9824

Beel Controls Limited 2650 Pitfield Blvd Montreal Quebec H4S 1G9 (514) 334-6500 Branch: 764 Gordon Baker Rd. Willowdale Ontario M2J 2B4 (416) 494-1968

Bellofram Corporation 30 Blanchard Road Burlington MA 01803 (617) 272-2100 Distributors: **Muis Controls, Ltd.** Unit #4, 8308 113 Street Fort Saskatchewan Alberta T8L 2T2 (403) 998-7311 **Muis Controls** 610A 70 Avenue S.E. Calgary Alberta T2H 2J8 (403) 255-3741 **Hydroflo-Tubecraft Ltd.** 730 Belmoral Street Thunder Bay Ontario P7C 5V3 (807) 623-4224 **Annutronics Mechanical, Ltd.** 3550 Wolfedale road Mississauga Ontario L5C 2V8 (416) 272-1045 **Canada Panel Instrument, Ltd.** 10450 Gouin West Roxboro Quebec H8Y 3E8 (514) 683-6766 **Hydroflo Equipment Ltd.** 52 Caithness Street Winnipeg Manitoba R3H 0V4 (204) 633-0682

Bently Nevada Corp. P.O. Box 157 Minden NV 89423 (702) 782-3611 **Agent: J.W. Simpson, Tech. Sales/Canada Ltd.** 70 Gibsom Dr. Unit #4 Markham Ontario L3R 2Z3 (416) 495-2240

Berkeley Pump Ltd. 410 Finley Avenue Ajax Ontario L1S 2E3 (416) 683-2661 Branches: #1-3260 Viking Way Richmond BC V6V 1N6 (604) 270-8735 8191 Metropolitan Blvd. Est. Ville D'Anjou Quebec H1J 1X6 (514) 353-7231 117 Baig Blvd. Moncton New Brunswick E1E 1C9 (506) 388-4744

BES Team Inc. 103 Fensview Drive P.O. Box 272 Westwood Mass. 02090 (617) 769-7899

Betz Inc. Betz Laboratories Inc. 3026 Solandt Road Kanata Ontario K2K 2A5 (613) 592-5050 Branches: 1570 Provencher, Suite 340 Brossard Quebec J4W 2T8 (514) 866-5389 365 Evans Avenue, Suite 206 Toronto Ontario M8Z 1K2 (416) 259-7631 5045 8500 Macleod Trail S. Calgary Alberta T2H 2N1 (403) 253-2011 1055 boul. des Forges, Suite 410 Trois Rivi res Quebec G8Z 4J8 (819) 373-5122 Athabaska Place, Room 212 80 Chippewa Rd. Sherwood Park Alberta T8A 3Y1 (403) 464-5951 No. 13-7621 Vantage Way Delta British Columbia V4G 1A6 (604) 946-1377

Bigelow-Liptak of Canada Ltd. 1931 Mattawa Ave. Mississauga Ontario L4X 1K7 (416) 279-9501 Branch: 4014 MacLeod Trail S. Suite 200 Calgary Alberta T2G 2R7 (403) 243-7774

Bindicator Company 1915 Dove Street, P.O. Box 9 Port Huron MI 48060 (313) 987-2700 Distributors: **Peacock, Inc.** 1180 Aerowood Drive Mississauga Ontario L4W 1Y5 (416) 625-7100 **Peacock, Inc.** P.O. Box 140 Montreal Quebec H3C 2X5 (514) 366-5900 **Peacock, Inc.** 2715 18th Street N.E. Calgary Alberta T2E 7E6 (403) 230-2851 **Peacock, Inc.** 3919 101 Street Edmonton Alberta T6E 0A4 (403) 462-4244 **Peacock, Inc.** 2325 Burrard Street Vancouver B.C. V6J 3J2 (604) 731-3185

Biraghi Entrepose Industrial Park Becancour Quebec G0X 1B0 (819) 294-2521 TELEX 05-837191

Blackhawk Industries Inc. 607 Park Street Regina Saskatchewan S4N 5N1 (306) 924-1551

Blanchard-Ness Ltd. 3850 Losch Blvd. St-Hubert Quebec J3Y 5T6 (514) 656-6800 Branch: 4325 Steeles Ave. W. Downsview Ontario M3N 1V7 (416) 667-0558

Blenkhorn & Sawle Limited 100 Grantham Ave. P.O. Box 3010 St. Catharines Ontario L2R 7B9 (416) 684-9251

BLM Automatic Clutch Ltd. 863 Progress Ave. Scarborough Ontario M1H 2X6 (416) 438-6200

Bodine Electric Co. 2500 W. Bradley Pl. Chicago Ill. 60618 (312) 478-3515 Distributors: **Toronto Electric Co.** 72 Crockford Blvd. Scarborough Ontario M1R 3C4 (416) 755-7710 Telex 06963-654 **Renold Canada Ltd.** Park Road North Brantford Ontario N3T 5N4 (519) 756-6118 **12253 William Short Rd.** Edmonton Alberta T5B 2B7 (403) 474-2431 **P.O. Box 180** Hampton New Brunswick E0G 1Z0 (506) 832-5324 **5760 Andover Ave.** Mount-Royal PQ H4T 1H4 (514) 731-3591 **110 Skyway Ave.** Rexdale Ontario M9W 4Y9 (416) 675-6434 **1290 Odlum Drive** Vancouver British Columbia V5L 3L9 (604) 255-5455 **1302 Notre Dame Ave.** Winnipeg Manitoba R3E 0P4 (204) 772-9541

Bogardus Wilson Ltd. 143-6450 Roberts Street Burnaby B.C. V5G 4K1 (604) 294-9101 Branches: 51 Terminal Avenue Nanaimo B.C. V9R 5C4 (604) 753-1102 3153 Thunderbird Crescent Burnaby B.C. V5A 3G2 (604) 421-1881 4451-54th Avenue S.E. Calgary Alta. T2C 2A2 (403) 279-2544 11224-143 Street Edmonton

Suppliers

Alta. T5M 1V5 (403) 455-9121 121 Plymouth Street Winnipeg Man. R2X 2T3 (204) 633-2504

Breslove Separator Co. 1609 Commonwealth Building Pittsburgh PA 15222 (412) 281-0309 **Representative: Elbowe Sales** 12131 Mitchell Road Richmond B.C. (604) 324-2291

Bristol Aerospace Ltd. P.O. Box 874 Winnipeg Manitoba R3C 2S4 (204) 775-8331

Bristol of Canada 234 Attwell Drive Rexdale Ontario M9W 5B3 (416) 675-3820

Broan Ltd. 1140 Tristar Drive Mississauga Ontario L5T 1H9 (416) 676-1300 Branch: 1140 Tristar Drive Mississauga Ontario L5T 1H9 (416) 676-1300

Brook Crompton Parkinson Ltd. 264 Attwell Dr. Rexdale Ontario M9W 5B5 (416) 675-3844 Branch: 169/171 Barr St. St. Laurent P.Q. H4T 1W6 (514) 735-5688

Brooks Instrument Div. Emerson Electric Can. Ltd. P.O. Box 150 Markham Ontario L3P 3J6 (416) 294-9340 Branches: 11-3716, 56 Ave. S.E. Calgary Alberta T2C 2B5 (403) 236-0560 4645 Rue Fairway Lachine P.Q. (514) 637-3715

Brooks Instrument Division 407 W. Vine Street Hatfield, PA 19440 (215) 362-3500 Branches: PO Box 150 Markham Ontario L3P 3J6 (416) 294-9340 Bay 11, 3716-56 Ave. S.E. Calgary Alberta T2C 2B5 (403) 236-0560

Brunette Machine Works Ltd. #5 Capilano Way New Westminster B.C. V3L 5G3 (604) 522-3977 Branch: 1076 Great Street Prince George, B.C. V2N 2K8 (604) 563-0596

Buckman Laboratories of Canada Ltd. 1600 50th Ave. Lachine Quebec H8T 2V5 (514) 631-6737

Byron Jackson Div. Borg-Warner (Canada) Ltd. 23 Bertrand Avenue Scarborough Ontario M1L 2P3 (416) 757-6241 Branches: 237 Place Frontenac Pointe Claire Quebec (514) 694-3520 8170-50th Street, Suite 264 Edmonton Alberta (403) 465-9736 5920-1A Street S.W., Suite 106 Calgary Alberta (403) 252-7769

C

C & M Products Ltd. Thomas Industries 189 Bullock Drive Markham Ontario L3P 1W4 (416) 294-9570

C-E Canada Combustion Engineering-Superheater Ltd. Suite 501-99 Bank St. Ottawa Ontario K1P 6C5 (613) 560-4545 Branches: 1010 Sherbrooke St. W., Suite 605 Montreal Quebec H3A 2R7 (514) 842-8701 Suite 2810 Commercial Union Tower Toronto Dominion Centre Toronto Ontario M5K 1K7 (416) 363-8041 350-One Palliser Square Calgary Alberta T2G 0P6 (403) 264-5106 1256 United Kingdom Building 409 Granville Street Vancover British Columbia V6C 1T2 (604) 681-7385

Caframo Ltd. Box 70, Airport Road Wiarton Ontario N0H 2T0 (519) 534-1080

Caltrol 2 Thorncliffe Pk. Dr., Unit 21 Toronto Ont. M4H 1H2 (416) 423-0692

Cambridge Filter Corp. P.O. Box 517 Mississauga Ontario L5A 3A2 (416) 678-1334

Campeau Corp. 35 Boul. Desrosiers CP 157 Gatineau Qué. J8P 6J2 (819) 663-5301

Can-Am Air Leakage Control Systems 124 Cartwright Ave. Toronto Ont. M6A 1V2 (416) 782-0284

Can-am Instruments Ltd. Mississauga Ontario L4X 1K1 (416) 277-4541

Can-Eng Sales 6800 Montrose Rd. Niagara Falls Ontario L2E 6V5 (416) 356-1327

Canada Fans P.O. Box 1350 Picton Ontario K0K 2T0 (613) 476-2150 Branch: P.O. Box 595 Granby Quebec J2G 8E9

Canada Valve Inc. P.O. Box 1001 Milton Ontario L9T 4B6 (416) 878-0541 Branches: 120 Acheson Road Winterburn Alberta T0E 2N0 (403) 962-6655 840 Cynthia Street Saskatoon Saskatchewan S7L 5S5 (306) 664-8686 769 Notre Dame Drive Kamloops B.C. V2C 5N8 (604) 372-3453 305 Sheldon Drive Cambridge Ontario N1T 1A7 (519) 623-9110/653-0910 3155 Huron Church Road Windsor Ontario N9A 6J3 (519) 966-3431 1015 Hargrieve Road London Ontario N6E 1P6 (519) 686-1700 452 Bowes Road, Unit #1 Concord Ontario L4K 1C8 (416) 669-9762 25 George Street Barrie Ontario L4N 2G5 (705) 726-3221 111C Adam Street Belleville Ontario K8N 5K3 (613) 962-2533 1275 Kelly Lake Road Sudbury Ontario P3E 4M9 (705) 675-2111 C.P. 437 Stn. St. Martin 975 rue Berlier Laval Quebec H7S 1Z9 (514) 384-7360 15 Bentley Avenue Ottawa Ontario K2E 6T7 (613) 226-1313 1175 rue Janelle Drummondville Quebec J2B 6X1 (819) 478-4931

Canadian Applied Technology 16th Ave., Buttonville Airport Markham Ontario L3P 3J9 (416) 477-6681 Branch: 500 Beaverbrook Ct. Fredericton N.B. E3B 5X4 (506) 457-1523

Canadian Boilers Ltd. 6853-B Airport Rd. Mississauga, Malton Ontario L4V 1E6 (416) 671-4600

Canadian Coleman Co. Ltd. 700 Kipling Ave. Toronto Ontario M8Z 5V6 (416) 252-6161

Canadian General Electric 940 Lansdowne Ave. Toronto Ontario M6M 3Z4 (416) 530-5052 Construction Products Dept. Branch: In all major cities **Industrial Apparatus:** 107 Park St. N. Peterborough Ontario K9J 7B5 (705) 748-7559 Industrial Apparatus Department Branches: 3707 Joseph Howe Drive, Station "A" Halifax N.S. B3L 4H8 (902) 455-0551 3 Place du Commerce, Suite 200 Ile des Soeurs (Nuns' Island) Montreal P.Q. H3E 1J2 (514) 761-3581 2200 Charest Blvd. West Quebec City Quebec G1N 2G4 (418) 681-0231 505 Woodward Avenue, P.O. Box 3019 Station "C" Hamilton Ontario L8H 7J6 (416) 549-5281 48 Broad Street, P.O. Box 2480 Saint John N.B. E2L 3V9 (506) 693-2337 175 Richmond Road P.O. Box 9389 Ottawa Ontario K1G 4B3 (613) 722-6511 1900 Eglinton Ave. E. Scarborough Ontario M1L 2M1 (416) 751-3220 900 Wellington St. Sarnia Ontario N7T 7J7 (519) 344-8807 1091 LaSalle Blvd. Sudbury Ontario P3A 1Y2 (705) 566-3931 1125 McDonald St., P.O. Box 860 Regina Saskatchewan S4P 3B1 (306) 569-8055 3603-8th Street S.E. Calgary Alberta T2G 3A6 (403) 243-0244 945 St. James St., Suite 102 Winnipeg Manitoba R3H 0K4 (204) 774-5454 Suite 502 14310-111th Avenue Edmonton Alberta T5M 3Z7 (403) 451-6742 3030 East Broadway, P.O. Box 2189 Vancouver B.C. V6B 3V9 (604) 255-2411 **Lamp Department:** 115 Dufferin Toronto Ontario M6K 1Y9 (416) 537-4481 Branch: In all major cities **Meter & Instrument Div:** 1130 Blv Charest O. Quebec Que. G1N 2E2 (419) 683-3431 Branch: In all major cities **Silicone Roofing Section:** 720 Caledonia Rd. Toronto Ontario M6B 3X7 (416) 530-5667 Branch: 5000 Jean Talon St. W. Montreal Quebec H4P 1X2 (514) 989-5858

Canadian Glass Industries Ltd. 120 Adelaide Street West Toronto Ontario M5H 1T1 (416) 363-2194 Branches: Charlebois Industries 6005 Avenue Couture Cite de St-Leonard P.Q. H1P 3E1 8484 Keele Street Concord Ontario L4K 1B3 500-10th Avenue E. Regina Sask. S4P 2Z5 9845-42nd Avenue Edmonton Alta. T6E 0A3 7979 Enterprise St. Unit 1 Lake City Burnaby B.C. V5A 1V5

Canadian Great Energy Marketing 3060 Lakeshore Rd. W. Oakville Ontario L6L 1J2 827-6446

Canadian Schack Ltd. 227 Place Frontenac Pointe Claire Quebec H9R 4Z7 (514) 694-3098

Canadian Worcester Controls Ltd. 20 Mid-Dominion Acres Scarborough Ontario M1S 4A5 (416) 298-1671

Canarm Ltd. 149 Parkedale Ave. Brockville Ontario K6V 5V6 (613) 342-5424 Branches: 200-1615 10th Ave. S.W. Calgary Alberta T3C 0J7 (403) 244-5810 415 Oakdale Rd. Downsview Ontario (416) 741-8891

Canertech Inc. 213 Notre Dame Ave., 10th Flr. Winnipeg Man. R3B 1N3 (204) 949-1160

Cantherm Heating Ltd. 8089 Trans Canada Hwy. Ville St. Laurent Quebec H4S 1S4 (514) 334-4870 Branch: 57 Galaxy Road, Unit 6 Rexdale Ontario M9W 5P1 (416) 675-6390

Canuck Garage Doors Co. 1662 Bonhill Rd., Unit 15 Mississauga Ontario L5T 1E1 671-2700 Representatives: **Metropolitan Garage Doors Ltd.** 1770 Britannia Road East Mississauga Ontario **Upward Garage Doors Ltd.** 1094 Westprot Crescent Mississauga Ontario **Canadian Garage Doors Ltd.** 1750 Bonhill Road Mississauga Ontario

Capital Controls P.O. Box 211 Colmar PA 18915 (215) 822-2901 Representatives: **A.G. Dunbar** 2745 Dutch Village Road Halifax Nova Scotia B3L 4G7 (902) 455-5421 **Atlantic Tech Sales & Services** P.O. Box 4549 St. John's Newfoundland A1C 6C8 (709) 579-6588 **Control & Metering** 711 Kipling Avenue Toronto Ontario M8Z 5G4 (416) 259-8411 **Control & Metering** 1503 1st Street NE Calgary Alberta T2E 3B7 **Mackenzie & Feimann Ltd.** 12835 146th Street Edmonton Alberta T5L 2H6 (403) 453-1506 **Mackenzie & Feimann Ltd.** 3225-54th Avenue S.E. Calgary Alberta T2C 0A9 (403) 272-9791 **Mackenzie & Feimann Ltd.** 970 Malkin Avenue Vancouver B.C. V6A 2K8 (604) 253-6335 **Mackenzie & Feimann Ltd.** 875 Bradford Street Winnipeg Manitoba R3H 0N6 (204) 774-1971 **Mackenzie & Feimann Ltd.** Suite 311-255 West 1st Street North Vancouver B.C. V7M 3G8 **Mackenzie & Feimann Ltd.** 1516 Ontario Avenue P.O. Box 2028 Saskatoon Saskatchewan S7K 3S7 (306) 652-8894 **Nortec S.G.S. Inc.** 3300 Boulevard Cavendish Ste. 230 Montreal Quebec H4B 2M8

Carbone Lorraine Corp. 225 Harwood Blvd. Dorion Que J7V 1Y3 (514) 455-5728

Carborundum Resistant P.O. Box 808 Niagara Falls N.Y. 14174 (716) 278-6221 Branches: Carborundum Canada Inc. P.O. Box 1007 Niagara Falls Ontario L2E 6W5 (416) 358-5761 Carborundum Canada Inc.

Suppliers

P.O. Box 82, Air Canada Bldg. Mirabel Int'l. Airport Mirabel Quebec J7N 1A2 (514) 476-0330

Carrier Canada Limited 8100 Dixie Rd. Brampton Ontario L6T 2J8 459-8000 Distributors: 3630 East 1st Ave. Vancouver B.C. V5M 1C3 (604) 291-9691 627 Manitou Road S.E. Calgary Alberta T2G 4C2 (403) 287-1723 11507-120 Street Edmonton Alberta T5G 2Y5 (403) 454-9602 #3, 1408 Ottawa St. Regina Saskatchewan S4R 1P5 (306) 522-9929 2366 Avenue C. North Saskatoon Sask. S7L 5X5 (306) 665-3242 39 Keith Road Winnipeg Manitoba R3H 0H7 (204) 633-9647 9 Cityview Drive Rexdale Ontario M9W 5A5 (416) 245-1100 3455 Harvester Rd. #19 Burlington Ontario L7N 3P2 (416) 632-2131 1770 King Street E Kitchener Ontario N2G 2P1 (519) 744-5601 747 Hyde Park Road, #109 London Ontario N6H 3S3 (519) 471-8410 1750 Courtwood Crescent Ottawa Ontario K2C 2B5 (613) 225-6974 278 Nepahwin Avenue Sudbury Ontario P3E 2H6 (705) 522-3421 3456 Walker Road Windsor Ontario N8W 3S3 (519) 966-3022 391 St. Croix Blvd. Ville St. Laurent Quebec H4N 2L3 (514) 748-8731 3004 Chemin Royal Quartier De Gillard Beauport Quebec G1E 1T6 (418) 663-2935 45 Alderney Drive #815 Dartmouth Nova Scotia B2Y 2N6 (902) 463-1277

Catalytic Damper Co. Ltd. Box 550 Bobcaygeon Ontario K0M 1A0 (705) 738-2349

CEA Canada 585 Blvd. Cuvé Boivin Boisbriand P.Q. J7G 2A8 (514) 435-1961 Branch: 121-10551 Shellbridge Way Richmond B.C. V6X 2W9 (604) 270-9846

Ceilcote Canada 2695 Drew Road Mississauga Ontario L4T 3X1 (416) 671-1790 Branch: 1102-230 Huntington Close Calgary Alberta T2K 5X9 (403) 275-4126 Representatives: **Plasticor Sales Ltd.** 4104 Fairview Street Burlington Ontario L7L 4Y8 (416) 632-4740 **Hyatt Industries Ltd.** 1572 West 4th Avenue Vancouver B.C. V6J 1L7 (604) 736-7301

Centri-spray Corp. 39001 School Craft Livonia Michigan 48150 (313) 464-0100 **Agent: Centri-spray Corp.** 1440 Pelham St. S. Fonthill Ontario L0S 1E0 (416) 892-2277

CES-Conservation Energy Systems Box 8280 Saskatoon Saskatchewan (306) 665-6030

CESCO 1240 N.E. 175th P.O. Box 55548 Seattle WA 98155 (206) 365-1234

Chemiquip Canada Inc. 5165 Queen Mary Rd. Suite 414 Montreal P.Q. H3W 1X7 (514) 484-6893

Chermacryl Plastics Limited 360 Carlingview Drive Rexdale Ontario M9W 5X9 (416) 675-4433

Chicago Blower Canada Ltd. 901 Regent Ave. W. Winnipeg Manitoba R2C 3A9 (204) 222-4216 Representatives: **M & M Engineering Ltd.** 3639 Dutch Village Road Halifax N.S. B3N 2T1 (902) 443-1114 **Tech-Air (1981) Ltd.** 33 Blakney Street Moncton N.B. E1A 4B8 (506) 855-4515 **Comfort-Aire Ltd.** 5870 Andover Town of Mount Royal Quebec H4T 1H4 (514) 739-2351 **Walmar Agencies** 15 Caesar Avenue Nepean Ontario K2G 0B1 (613) 225-9774 **Pegon & Little Limited** Unit #1, 9 Royalcrest Rd. Toronto Ontario M9V 2L6 (416) 743-5000 **Thermel Engineering Sales Ltd.** 4240-91A Street Edmonton Alberta T6E 5V2 (403) 463-0933 **Melark Sales Incorporated** 3295 Mainway Drive, Unit 5 Burlington Ontario L7M 1A6 (416) 335-2717 **G.S. Industrial Sales Ltd.** 34 Lee Avenue North Bay Ontario P1A 2J6 (705) 474-1216 **Harnett & North Limited** 504-16th Avenue Thunder Bay Ontario P7B 2R8 (807) 344-9601 **Qu'Appelle Engineering Ltd.** 1800 College Avenue Regina Saskatchewan S4P 1C1 (306) 522-1691 **Mid-Can Mechanical Sales** 311 Hilliard St. E. Saskatoon Saskatchewan S7J 0E5 (306) 664-2915 **Airtherm Engineering Sales Ltd.** #200 1615-10th Avenue S.W. Calgary Alberta T3C 0J7 (403) 245-2886 **Olympic International Agencies Ltd.** 1591 Bowser Ave. North Vancouver B.C. V7P 2Y4 (604) 987-2291

Chloride Canada Limited 7480 Bath Rd. Mississauga Ontario L4T 1L2 (416) 677-8910 Branch: 4946 Bourg St. Montreal Quebec H4T 1J2 (514) 735-2573

Chromalox Canada 210 Rexdale Blvd. Rexdale Ontario M9W 1R4 743-8000

Circul-Aire Inc. 5885 O. Henri Bourassa Montreal Quebec H4R 1B7 (514) 336-3330 Branches: 2615 Marcel Montreal Quebec H4R 1A6 (514) 336-1400 8 Bolton Toronto Ontario

Cla-Val Canada Ltd. 2 Ainshe Drive Beamsville Ontario L0R 1B0 (416) 563-4963

Clawsey-Sohrt Mfg. Co. Ltd. 1297 Industrial Rd. Cambridge Ontario N3H 4T8 (519) 653-7129

Clayton Industries 4213 N. Temple City Blvd. El Monte CA 91731 (213) 443-9381 Branch: 67 Steelcase Rd., West Unit B Markham Ontario L3R 2M4 (416) 476-6801 **Agent: J. Dunlop Agencies Ltd.** 6706 Laird Ct. S.W. Lakeview Village Calgary Alberta T3E 6G1 (403) 249-9928

Clearview Insulating Glass 605 Fenmar Drive, Unit 1 Weston Ontario M9L 2R6 (416) 742-6555

Clemmer Industries (1964) Limited 446 Albert St. Waterloo Ontario N2J 4A1 (519) 884-4320

Cleveland Controls Inc. 1111 Brookpark Rd. Cleveland Ohio 44109 (216) 398-0330 **Representative: MacLeod & Grant Ltd.** P.O. Box 809 251 Foord St. Stellarton Nova Scotia B0K 1S0 (902) 752-5532 Distributors: **Graham Co. Ltd.** P.O. Box 9 St. John N.B. E2L 3X1 **Nortech Control Equipment Inc.** 135-4 The West Mall Etobicoke Ontario M9C 1C2 (416) 622-7820 **Ontor Ltd.** 12 Leswyn Rd. Toronto Ontario (416) 781-5286 Normac Ltd. 210 Brunswick Pointe Claire Quebec H9R 4Z6 (514) 694-3284

Coen Burners Canada Inc. 1350 Boul de L'industrie Lachenaie Quebec J6W 4M4 (514) 471-5007 **Agents: K.V. Combustion & Energy Systems Ltd.** 55 Nugget Avenue, Suite 223A Scarborough Ontario M1S 3L1 **Inproheat Industries Ltd.** 680 Raymur Avenue Vancouver B.C. V6A 2R1 **Thermaltech Combustion Inc.** 8019 Rue Alfred Ville D'Anjou Qué. H1J 1J3

Coldmatic of Canada Ltd. 4500 Chesswood Drive Downsview Ontario M3J 2B9 665-8640

Coldstream Products of Canada Ltd. 1855 Sargent Avenue Winnipeg Manitoba R3H 0E3 (204) 775-8274 Representatives: 6004-101 Avenue Edmonton Alberta T6A 0G8 (403) 469-4506 144 Rundleson Way, N.E. Calgary Alberta T1Y 3H8 (403) 285-3882 40 Harrow Circle Edmonton Alberta T5A 2S5 (403) 478-8637 Distributors: **Dudley Kill & Sons Ltd.** 1970 Spicer Road North Vancouver B.C. V7H 1A2 (604) 929-7331 **Fleming Pedlar Ltd.** 1009 Park Street Regina Saskatchewan S4N 5H4 (306) 352-9671 **Fleming Pedlar Ltd.** Box 1254 Saskatoon Saskatchewan S7K 3N2 (306) 244-5539 **Fleming Pedlar Ltd.** 565 Munroe Avenue Winnipeg Manitoba R2K 1H7 (204) 667-7863 **Guardsman Distributors** 110 Norfinch Drive, Unit 8 Downsview Ontario M3N 1X1 (416) 663-6534 **Les Equipements Art Walsh Inc.** 11660, 4ieme Avenue Riviere des Prairies Quebec H1E 3B9 (514) 648-7087 **R.L. Fulton Equipment Limited** 5654 Russell St. P.O. Box 1402N Halifax Nova Scotia B3K 5H7 (902) 453-2650 **Ian MacInnes Enterprises Limited** 44 Wright Avenue Dartmouth Nova Scotia B3B 1G6 (902) 463-1773

Colorado Electro-optics Inc. 2200 Central Ave. Boulder CO 80301 (303) 494-3200

Comalco Ltd. 6325-12th Street S.E. Calgary Alberta T2H 2K1 (403) 259-3101 TELEX 03-821172 CGY Branch: Ste. 201, 801 York Mills Rd. Don Mills Ontario M3B 1X7 (416) 449-8036 TELEX 06-966710 VIP-TOR

Combustion Research Corp. 2516 Leach Road Pontiac MI 48057 (313) 852-3611

Comeau Technique Ltd. 01260 Richmond St., Suite 3600 Montreal Quebec H3K 2H2 937-6361

Comington Computer System Corp. P.O. Box 69 Glen Robertson Ontario K0B 1H0 (613) 874-2411 Distributors: **Electrodesign Ltd.** 290 Montreal Rd., Suite 2 Vanier Ontario K1L 6C1 (613) 745-0541 **Electrodesign Ltd.** 1925-5nd Ave., Suite 1 Lachine Quebec H8T 3C3 (514) 636-4838

Compak Canada Inc. 2185 North Sheridan Way Mississauga Ontario L5K 1A4 (416) 882-7350 Branches: 400 Montee De Liesse Montreal Quebec H4T 1N8 (514) 341-3432 4120-78 Avenue Edmonton Alberta T6B 3M8 (403) 468-2016

Conamara Limited 2180 Speers Road Oakville Ontario L6L 2X8 (416) 825-1400

Condecor Prod. Ltd. P.O. Box 159 Acton Ontario L7J 2M3 (416) 453-1991

Conserval Engineering Inc. 855 Alness St., Unit 1 Downsview Ontario M3J 2H8 (416) 661-7057 Branches: P.O. Box 818 Trenton Ontario K8V 5R8 (613) 394-2492 11 Maxwell Cr. London Ontario N5X 1Y9 (519) 453-9534

Contric Automation Ltd. 1730 McPherson Court-1 Pickering Ontario L1W 3E6 (416) 839-0182

Control Devices 14605-134 Ave. Edmonton Alberta T5L 4S9 (403) 451-1440 Branches: 7016 Lougheed Highway Burnaby B.C. V5A 1W3 (604) 420-1333 80 Paramount Road Winnipeg Manitoba R2X 2W3 (204) 632-4471 1110 Kamato Road Unit 1 Mississauga Ontario L4W 2P3 (416) 624-4640 2323 Halpern St. St. Laurent Quebec H4S 1S3 (514) 357-9560 511 E. Ross Avenue Regina Saskatchewan S4N 4W5 (306) 359-3390 17235-105 Ave. Edmonton Alberta T5S 1H2 (403) 489-2541 10 Akerley Blvd. P.O. Box 895 Dartmouth N.S. B2Y 3Z6 (902) 463-1062 P.O. Box 2040, Station C St. John's Newfoundland A1C 5R6 (709) 753-3412

Conval Equipment 1111 Finch Ave. W. Downsview Ontario M3J 2E5 (416) 665-8960 Branches: 1173 Michener Rd. Sarnia Ontario N7S 4W3 (519) 344-3646 505 Kenora Ave. Hamilton Ontario L8E 3P2 (416) 561-4579

Copes-Vulcan Div. Martin & Rice Ave. P.O. Box 577 Lake City PA 16423 (814) 774-3151 Branch: Harvie Settlement Road Orillia Ontario L3V-6R9 (705) 326-1666

Suppliers

Distributors: **Inproheat Industries Ltd.** 680 Raymur Avenue Vancouver British Columbia V6A 2R1 **Mechanical Equipment Limited** 1071 Pratt Avenue Montreal Quebec **Thermal & Hydraulic Equipment Limited** 1425 Bayview Avenue-3rd F Toronto Ontario M4G 3A9

Corning Glass Works Houghton Park A-1-7 Corning New York, USA 14831 (607) 974-8145 Branch: 135 Vanderhoof Ave. Toronto Ontario M4G 2J3 065-24046

Cowan Canada Ltd., H W Box 268 Richmond Hill Ontario L4C 4Y2 (416) 773-4331

Criterion Instruments Ltd. 30 Progress Ave. Scarborough Ontario M1P 4W8 (416) 299-6666

Crompton Instruments Ltd. 2717 Rena Road Mississauga Ontario L4T 3K1 (416) 671-2253 TELEX 06-983545 Branch: 165 Barr Street St. Laurent Quebec

CSE Ontario Limited 55 Healey Rd. Box 891 Bolton Ontario L0P 1A0 (416) 857-3474

Culligan of Canada 2213 North Sheridan Way Mississauga Ontario L5K 1A5 (416) 822-1601

Curwen & Newbery Ltd. Fleming Way, Crawley West Sussex, U.K. PH10 2QE 0293 25151

Custom Glass Ltd. 11771-167 St. Edmonton Alberta T5M 3Y2 (403) 452-6010 Branches: 3815-72 Ave. S.E. Calgary Alberta T2C 2K3 (403) 279-8922 555 Steeprock Drive Downsview Ontario M3J 2X1 (416) 630-5163 **Representative: Panolite Products Limited** 12114-86th Avenue Surrey British Columbia V3W 3H7 (604) 591-5531

Cutler-Hammer Industrial Control 45 Progress Ave. Scarborough Ontario M1P 2Y6 (416) 293-3673

D

Danfoss Mfg. Co. Ltd. 1230 Lakeshore Rd. East Mississauga Ontario L5E 1E9 (416) 274-2311

Danhart Energy Systems Ltd. 360 Enford Road Richmond Hill Ontario L4C 3G1 (416) 883-1711

Danhart Energy Systems Ltd. 360 Enford Rd. Richmond Hill Ontario L4C 3G1 (416) 883-1711 **Representative: Melark Sales Incorporated** 3295 Mainway Dr. Unit 5 Burlington Ontario L7M 1A6 (416) 335-2717

Darling Duro Ltd. 140 Prince Street Montreal Quebec H3C 2N2 (514) 866-3451

Dashwood Industries Ltd. P.O. Box 10 Centralia Ontario N0M 1K0 (519) 228-6624 Branches: 180 Connie Crescent, Unit 4 Langstaff Business Park Concord Ontario L4K 1B1 (416) 669-1101 42 Highway 17B Kanata Ontario K2K 1Y1 (613) 592-1828 90 Engelhard Drive Aurora Ontario L4G 3L6 (416) 727-9459 3525 Lougheed Highway Vancouver British Columbia V5M 1A7 (604) 291-7111 1989 1st Avenue Prince George British Columbia V2L 2Z3 (604) 563-8884 2508 Kenworth Road Nanaimo British Columbia V9T 3Y4 (604) 758-2442 3261 Westsyde Road Kamloops British Columbia V2B 7G9 (604) 578-9211 3737 Scott Street Vancouver B.C. (604) 438-5540

Datron Systems Inc. Nicholson Division 12 Oregon St. P.O. Box 113 Wilkes-Barre PA 18773 (717) 824-8701 Representatives: **Jenkins Control Systems Ltd.** #203, 1035-64th Ave. S.E. Calgary Alberta T2H 2J7 (403) 259-3346 **Jenkins Control Systems Ltd.** 10366-65th Avenue Edmonton Alberta T6H 1T9 (403) 438-0350 **Jenkins Control Systems Ltd.** 1900, 355 Burrard Street Vancouver B.C. V6C 2J3 (604) 669-7585 **Romatec-RML** Division of Robert Muddiman Ltd. 452 McNicoll Avenue Willowdale Ontario M2H 2E1 (416) 499-0222 **Romatec-RML** Division of Robert Muddiman Ltd. 6535 Henri Bourassa Blvd., West Montreal Quebec H4R 1C9 (515) 332-9302 **Romatec-RML** Division of Robert Muddiman Ltd. 2 Bluewater Road Atlantic Acres Industrial Park Bedford Nova Scotia B4B 1G7 (902) 835-5222 **Romatec-RML** Division of Robert Muddiman Ltd. 461 Scott Road Sarnia Ontario N7T 7H5 (519) 337-2329 **Romatec-RML** Division of Robert Muddiman Ltd. 2349 Fairview Street, Suite 203 Burlington Ontario L7R 2E3 (416) 632-7410

Day-Ray Products Inc. 1133 Mission St. P.O. Box 189 South Pasadena CA 91030 (213) 682-1189 **Representative: Labelle Lubricants** 138 Clarence Gagnon St. Rose Quebec H7L 3C1 (514) 625-4409

Dean Products Inc. 985 Dean St. Brooklyn New York 11238 (212) 789-4444

Deltak Corporation P.O. Box 9496 Minneapolis Minnesota 55440 (612) 544-3371 Representatives: **Bigelow-Liptak of Canada** 1931 Mattawa Avenue Mississauga Ontario L4X 1K7 (416) 279-9501 **Bigelow-Liptak of Canada Ltd.** 4014 McLeod Trail South Suite 200 Calgary Alberta T2G 2H7 (403) 243-7774 **Bigelow-Liptak of Canada Ltd.** 4075 Av. de Courtrai Montreal Quebec H3S 1B8 (514) 731-3867 **Bigelow-Liptak of Canada Ltd.** 518 Williams Drive Box 519 Sarnia Ontario N7T 7J4 (519) 337-7548

Devar Inc. 706 Bostwick Ave. P.O. Box 589 Bridgeport CT 06601 (203) 368-6751 Representatives: **Cantech Controls Ltd.** 1916-27th Avenue N.E. Calgary Alberta T2E 7A5 (403) 230-1581 **Cantech Controls** 10604-105th Ave. Edmonton Alberta T5H 0L2 (403) 425-9810 **Cantech Controls Ltd.** 1080 Brock Rd., So. Unit #4 Pickering Ontario L1W 3H3 (416) 831-2115 **Cantech Controls Ltd.** 2800 Pitfield Blvd. St. Laurent Quebec H4S 1G9 (514) 334-3860 **Camtech Controls Ltd.** 242-A Indian Road So. Suite 210S Sarnia Ontario N7T 3W4 (519) 337-5081 **Cantech Controls Ltd.** 102-2225 Hanselman Court Saskatoon Saskatchewan S7L 6A8 (306) 653-4226 **Cantech Controls Ltd.** 1601 West 4th Ave. Vancouver British Columbia V6J 1L8 (604) 736-2581 **Cantech Controls Ltd.** 206, 2030 Notre Dame Ave. Winnipeg Manitoba R3G 0J8 (204) 633-7254

Diamond Canapower P.O. Box 5051 1122 Pioneer Road Burlington Ontario (416) 335-0321 Branches: Suite 812, Cogswell Tower Scotia Square Halifax Nova Scotia B3J 3K1 (902) 423-4182 Suite 201, 2535 Cavendish Blvd. Montreal Quebec H4B 2Y5 (514) 484-8451 Suite 401, MacLeod Place Bldg. 5920 Macleod Trail S.W. Calgary Alberta T2H 0K2 (403) 253-0163 10508-169 Street Edmonton Alberta T5P 3X6 (403) 483-0474

Dillon & Co. Inc., W.C. 14620 Keswick Street Van Nuys CA., U.S.A. (213) 786-8812 Representatives: **Brian Engineering Limited.** 17 Bedford Trade Mart Bedford N.S. B0N 1B0 (902) 835-8322 **Brian Engineering Limited.** 2445 Duncan Rd. Montreal Quebec H4P 2A2 (514) 735-1671 **Brian Engineering Limited.** 45 Shaft Rd. Rexdale Ontario M9W 4M3 (416) 248-0226 **Brian Engineering Limited.** 330 Manitou Drive Kitchener Ontario N2C 1L3 (519) 576-2040 **Brian Engineering Limited.** 880 Philip St. Sarnia Ontario N7T 1Z6 (519) 337-7591

Doerr Electric Corp. P.O. Box 67 Cedarburg WIS., U.S.A. 53012 (414) 377-0500 TELEX 026744 Representatives: **Hugh Phelan Ltd.** P.O. Box 728 Bolton Ontario L0P 1A0 (416) 857-4080 **Madison Industrial Equip. Ltd.** 865 Terminal Ave. Vancouver B.C. V6A 2N3 (604) 685-6551

Doo-al Aluminum Windows 755 Wallace Road North Bay Ontario P1B 8G4 (705) 476-2800

Douglas Power Equipt. Ltd. 1300 W. 6 Ave. Vancouver B.C. V6H 1A7 (604) 736-0351

Dow Chemical Canada Inc. P.O. Box 1012 Sarnia Ontario N7T 7K7 (519) 339-3667 Branches: 999 West Hastings Street Suite 1560 Vancouver B.C. V6C 2W2 250-6th Avenue, SW Suite 3101 Bow Valley Square 4 Calgary Alberta T2P 3H7 10025 Jasper Avenue Suite 2412 Edmonton Alberta T5J 1S6 199 North Leonard Street Regina Saskatchewan S4N 5X5 201-2366 Avenue C, North Saskatoon Saskatchewan S7L 5X5 330 St. Mary Avenue #800, Royal Trust Towers Winnipeg Manitoba R3C 3Z5 170 Attwell Drive Rexdale Ontario M9W 5Z5 7th Floor, Suite 702 Cogswell Tower Halifax Nova Scotia B2J 2A8 P.O. Box 5728 Mark II Building Van Guard Court St. John's Newfoundland A1C 1A0 **Agents: Canspec Inc.** 785 Plymouth Avenue Suite 301 Town of Mount Royal P.Q. H4P 1B3 **Canspec Inc.** Centre d'Achat Place Laurier 2700 Boul. Laurer Suite 512 Ste. Foy Quebec G1V 2L8 Distributors: **Ian MacInnes Enterprises** 44 Wright Avenue Dartmouth Nova Scotia B3B 1G6 **Ian MacInnes Enterprises Ltd.** 341 Collishaw Street Moncton New Brunswick

Dow Corning Canada Inc. 6747 Campobello Road Mississauga Ontario L5N 2M1 (416) 826-9600 Branches: 3300 Cavendish Blvd. Suite 345 Montreal P.Q. H4B 2M8 (514) 482-6030 5920 MacLeod Trail South Suite 401 Calgary Alberta T2H 0K2 (403) 253-9335 3540 West 41 St. Ave. Suite 210 Vancouver B.C. V6N 3E6 (604) 263-0213 TELEX 04-507838

Dresser Canada Inc. 6688 Kitimat Rd. Mississauga Ontario L5N 1P8 (416) 826-8411 Branches: 200 Avenue Rd. Cambridge Ontario N1R 5V7 (519) 621-3200 188 Pearl St. Brantford Ontario N3T 5S1 (519) 752-5414

Drummond Metal Products Ltd. 3111 Wharton Way Mississauga Ontario L4X 2B6 (416) 625-9122

Dual-Lite Products Ltd. 9345 Pascal Gagnon St. Leonard Quebec H1P 1Z4 (514) 326-6000

Dumenil Enterprises Inc. B. 8441 Dalton Road T.M.R. Quebec H4T 1V5 (514) 731-3905

Duncan Instruments Ltd. 122 Millwick Dr., Unit 3 Weston Ont. M9L 1Y6 (416) 742-4448 Branch: 6600 TransCanada Hwy. Suite 150 Pointe Claire P.Q. H9R 4S2 (514) 697-0356

Duo-Matic Olsen Inc. P.O. Box 900 Tilbury Ontario N0P 2L0 (519) 682-2062 Branches: 8200-8210 Avenue de L'Industrie Ville d'Anjou P.Q. H1J 1S7 (514) 354-4898 13281 Comber Way Surrey B.C. V3W 5V8 (604) 596-6221 2510 Bond Street Park Forest South Illinois 60466 (312) 534-9000

Durakool Inc. 1010 N. Main Street Elkhart

Suppliers

Indiana 46514 (219) 264-1116 **Representative: Davis Controls Ltd.** Post Office Box 160 Islington Ontario M9A 4X2 (416) 239-2383

Duro-Test Electric Ltd. 419 Attwell Dr. Rexdale Ontario M9W 5W5 (416) 675-1623 Branch: 43 Esterel P.O. Box 255 Place Bonaventure Montreal Quebec H5A 1B2 (514) 861-1529

Dwyer Instruments Inc. P.O. Box 373 Michigan City IN 46360 (219) 872-9141 **Agents: John Sherman Agencies Ltd.** 1641 Venables Street Vancouver B.C. V5L 2H1 (604) 254-3113 **E.H. Price Sales Limited** 65 Dawdney Avenue Winnipeg Manitoba R3B 0E1 (204) 942-4521 **Baker Instruments Limited** 118 Doncaster Avenue Thornhill Ontario L3T 1L3 (416) 889-8642 **FURNECO** 4520 Rue de la Roche Montreal Quebec H2J 3J6 (514) 527-1561

Dynatron Inc. P.O. Box 745 Wallingford CT., USA 06492 (203) 265-7121 090602 Representatives: **Industrial Projects Ltd.** 100-14 The East Mall Toronto Ontario M8Z 5X2 (416) 252-7368 **Industrial Projects Ltd.** 3300 Cavendish Blvd. Montreal Quebec H4B 2M8 (514) 489-5769 **Willar Engineering Ltd.** 422 Consumers Road Willowdale Ontario M2J 1P8 (416) 499-4421 **Willer Engineering Ltd.** 1179 Decarie Rd. Montreal Quebec H4L 3M8 (514) 748-6169

E

E.A. Electric 2265 Midland Ave. Scarborough Ontario M1P 3E7 (416) 292-2295

Eaton Corporation 9921 Clinton Road Cleveland Ohio 44144 (216) 281-2211 Representatives: **Rumble Equipment Ltd.** 25 Baywood Road Rexdale Ontario M9V 3Y8 (416) 743-8711 TELEX 065-27283 **Rumble Equipment Ltd.** 2535 Cavendish Blvd., Suite 205 Montreal Quebec H4B 2Y5 (514) 487-6111 TELEX 055-66347 **K.H.W. Seppala Ltd.** 12 East 3rd Avenue Vancouver B.C. V5T 1C3 (604) 879-4541 TELEX 04-53136

EEV Canada Ltd. 67 Westmore Drive Rexdale Ontario M9V 3Y6 (416) 745-9494

Electric Power Accessories Co. Limited 27 Selby Rd. Brampton Ontario L6W 1K5 (416) 457-8300

Electric Tachometer Corp. 68th & Upland Street Phila. PA. 19142 726-7723 Branches: 3351 Jacombs Road Richmond B.C. V6V 1Z6 (604) 278-4511 9307-35th Avenue Edmonton Alberta T6E 5R5 (403) 463-7488

Electro-Air Canada 400 Eddystone Ave. Downsview Ontario M3N 1H7 (416) 743-1680 **Agents: TEPCO Clean Air Inc.** #3-115-12th Street New Westminster B.C. B3M 4G8 **Parkland Enviro Mech Ltd.** 4607-88th St. N.E. Calgary Alberta T2N 4L5 **Beaver Engineering** 2345 Stanfield Road Mississauga Ontario L4Y 4A6 **Clawsey-Sohrt Mfg. Co. Ltd.** 1297 Industrial Road Preston Ontario N3H 4W3 **Beaver Engineering** 3129 Marentette Avenue Windsor Ontario N8X 4G1 **Beaver Engineering** P.O. Box 310 Bedford N.S. B4A 2X3 **Beaver Engineering** Newfoundland Branch Office P.O. Box 9156 St. John's Newfoundland A1A 2X9 **Confo-Air** 1226 est rue Jean Talon Montreal Quebec H2R 1W2 **Refrigeration Installation** 1455 Toronto Street Regina Saskatchewan S4R 1N1

Electrodesign Ltd. 1925-52nd Ave., Suite 1 Lachine Qubec H8T 3C3 (514) 636-4838 Branch: 4610 Dufferin St. Suite 205 Downsview Ontario M3H 5S4 (416) 664-4405

Electrohome Limited 809 Wellington St. N. Kitchener Ontario N2G 4J6 (519) 744-7111

Electromatic Components Ltd. 2990 Halpern St. St-Laurent Que. H4S 1R2 (514) 337-1104 Branch: 215 Carlingview Dr., Unit 111 Rexdale Ontario M9W 5E8 (416) 675-1336

Emerson Electric Canada Ltd. White-Rogers Div. P.O. Box 150 Markham Ontario L3P 3J7 (416) 294-9340 Branch: 4645 Fairway Street Lachine Quebec (514) 637-3715

Empire Controls 11 Bentworth Avenue Toronto Ontario M6A 1P1 (416) 787-1426

En Mar Systems Ltd. 1295 Industrial Rd. Cambridge Ontario N3H 4T8 (519) 653-8751 Branch: 1275 Eglinton Ave. East Unit #59 Mississauga Ontario L7N 1A4 (416) 624-7457

Encon Systems Inc. 504-C Vandell Way Campbell CA 95008 (408) 866-1711

Ener-Corp Management Limited 2 Donald Street Winnipeg Manitoba (204) 477-1283

Energy Control Centre 5070 Dundas St. W. Islington Ontario M9A 1B9 (416) 239-5596

Energy Efficiency Systems Inc. 1211 Stewart Avenue Bethpage New York 11714 (516) 938-6680 **Distributor: Volcano Inc.** 4300 Beaudry Avenue St. Hyacinthe Quebec J2S 8A5 (514) 774-5326 Branches: 331 Turcotte Avenuo Ville Vanier P.Q. G1M 1R3 31 La Fosse St. Trois-Rivieres P.Q. G9A 2M6 4300 Beaudry Avenue St. Hyacinthe P.Q. J2S 805 5205 Metropolitain Blvd. E Montreal P.Q. H1R 1Z7 2756 Lancaster Road Ottawa Ontario K1B 4S4 1900 Ellesmere Road - Unit 14 Scarborough Ontario M1H 2W2 4194-93rd Street Edmonton Alberta T6E 5P5 429 Dewitt Rd., Unit 8 Stoney Creek Ontario L8E 4C3

Energy Farms Ltd. Box #170 R.R. #1 Kingston Ontario K7L 4V1 (613) 544-1976

Energy Management Corp. 1107 Kenilworth Drive Baltimore MD 21204 (301) 321-9400

Energy Management Systems 1585 Britannia Rd. E., Unit #7B Mississauga Ontario L4W 2M4 (416) 677-6740

Energy Systems Company 167 Dolomite Drive Downsview Ontario M3J 2N1 (416) 663-5701

Energy Systems Inc. 9025 Flying Cloud Dr. Eden Prairie MN., U.S.A. 55344 (612) 925-4354 **Representative: Dominion Combustion Inc.** P.O. Box 342, Station U 227 Norseman St. Toronto Ontario M8Z 5P7 (416) 259-5958

Energy Technology Products Ltd. 7125-77 Avenue Edmonton Alberta T6B 0B5 (403) 468-1110 **Distributor: NR Murphy Ltd.** 430 Franklin Blvd. Cambridge Ontario N1R 5T8 (519) 621-6210

Energy-Wise 2000 Inc. 144 Armstrong Ave. Georgetown Ontario (416) 453-1991

Enmet Canada Ltd. #203-1945 Dundas St. East Mississauga Ontario L4X 2T8 (416) 625-2087

Enredco Canada Ltd. 7615 Kimber St., Unit #7 Mississauga Ontario L5S 1A8 678-0100

Entech Inc. 889 Bord-De-L'eau St. Sulpice Quebec J0K 3J0 (514) 589-5372

Enterprise Fdy. Co. Ltd. Lorne St. Sackville N.B. E0A 3C0 (506) 536-1160 Branches: 137 Horner Ave. Toronto Ontario M8Z 4Y1 (416) 255-8171 5600 Ferrier St. Town of Mount Royal P.Q. H4P 1M7 (514) 733-2213 11349-168A St. Edmonton Alberta T5M 3W4 (403) 454-7992 3450 Wellington Ave. P.O. Box 76829, Station S Vancouver B.C. V5R 5T2 (604) 437-3771

Entwistle Ltd., R.R. 12 Toffoli Place Willowdale Ontario M2M 3M5 (416) 221-8604

Environmental Energies Inc. 98 Front Street Copernish Michigan 49625 (616) 378-2921

Envirospec Inc. P.O. Box 86 Station "U" Toronto Ontario M8Z 5M4 (416) 252-2090

ERDCO Engineering Corp. Post Office Box 1310 Evanston Illinois, U.S.A. 60204 (312) 328-0550

Ernst Gage Co. 250 So. Livingston Ave. Livingston N.J., USA 07039 (212) 992-1400 Representatives: **Higginson Equipment Sls.** P.O. Box 5011 Burlington Ontario L7R 3Z4 (416) 335-2211 **Dolco Equipment Ltd.** 304-3130-66th Avenue, S.W. Calgary Alberta P2K 5K8 **Conval, Quebec** 3115 Sartelon St. Ville St. Laurent Montreal Quebec H4R 1E7 (514) 332-2301 **Finnan Engineering** 1149 Bellamy Rd. North Scarborough Ontario M1H 1H7 (416) 438-5070

Escodyne Ltd. P.O. Box 2088 Harvie Settlement Rd. Orillia Ontario L3V 6R9 (705) 326-3041 Representatives: **J.R. Stephenson Ltd.** 3624 Manchester Road S.E. Calgary Alberta T2G 3Z5 (403) 287-1930 **J.R. Stephenson Ltd.** 11627-145th Street Box 3336 Edmonton Alberta T5L 4J2 (403) 454-4596 **Makinson Winchester** 3640 Weston Road Unit #11 Weston Ontario M9L 1W2 (416) 749-8244 **Makinson Winchester** 5100 St. Francois Road St. Laurent Montreal Quebec H4S 1J8 (514) 334-1050 **J.R. Stephenson Ltd.** 1075 McDonald Street Regina Saskatchewan S4P 3C4 (306) 569-0654 **J.R. Stephenson Ltd.** 401-44th Street E. Saskatoon Saskatchewan S7K 0V9 (306) 242-1231 **Warco Specialties** 1243 A Kingsway Vancouver B.C. V5V 3E2 (604) 873-1618 **J.R. Stephenson Ltd.** 555 Madison Street Winnipeg Manitoba R3H 0L6 (204) 775-8561

ESD Industries Inc. 1146 Westport Cr., Unit 6 Mississauga Ontario L5T 1G1 (416) 671-3787 TELEX 968946

Esterline Angus Instrument Corp Box 24000 Indianapolis Indiana 46224 (317) 247-9164 **Representative: Assoc. Test Equip. Ltd.** 4216-12th St. N.E. Calgary Alberta T2A 5H7 (403) 230-1697

Extech Systems 1638 W. 6th Ave. Vancouver BC V6J 1R3 (602) 734-4211

F

Fabrication Z-Air Inc. 690 Place Trans-Canada Longueuil Quebec J4G 1P2 (514) 527-4541

Farrier Inc. 514 GSB Building 1 Belmour ave. Bala-Cynwyd PA 19004 (215) 667-3590 **Representative: Thermoco Eng.**

Suppliers

P.O. Box 569 Streetsville Ontario L5M 2C1 (416) 821-9700

Fattal Thermocanvas 30 Gloucester St., Suite 912 Toronto Ontario M4Y 1L6 (416) 923-2201 Branches: Wild Rose Building 599 Taylor St. Vancouver B.C. V6B 2K3 (604) 228-0215 JTL Building 2020 Centre Ave., N.E. Calgary Alberta T2E 0B1 (403) 236-3205 or 1 (800) 361-6171 Cratepack Building 9135-39 Ave. Edmonton Alberta T2E 0B1 (403) 463-7117 or 1 (800) 361-6171

Fiberglas Canada Inc. 3080 Yonge St. Toronto Ontario M4N 3N1 (416) 482-2836 Branches: P.O. Box 2209 68 McIlveen Dr. Saint John N.B. E2L 3V1 (506) 657-5850 2499, rue Watt Ste-Foy Québec G1P 3X2 (418) 651-4230 1875-52e Avenue Lachine Québec H8T 2Y1 (514) 636-4800 2750 Sheffield Road Ottawa Ontario K1B 3V9 (613) 745-0064-5-6 310 Humberline Drive Rexdale Ontario M9W 5S2 (416) 675-3070 398 Kenora Avenue Hamilton Ontario L8H 7L4 (416) 561-2011-2-3-4 219 Oxford Street Suite 102 London Ontario N6H 1S7 (519) 438-2131 89 Border Place 1313 Border Street Winnipeg Manitoba R3H 0X4 (204) 633-8076 15022 116th Avenue Edmonton Alberta T5M 3T4 (403) 452-8430 3807 9th Street S.E. Calgary Alberta T2C 3C7 (403) 243-5561 2445 Beta Avenue Burnaby B.C. V5C 5N1 (604) 294-6211

Fielding Crossman & Assoc. Ltd. 606 Gordon Baker Rd. Willowdale Ontario M2H 3B4 (416) 497-9111

Filterite/Brunswick Tech. Div. 2033 Greenspring Dr. Timonium Md 21155 (301) 252-0800 Representatives: **General Filtration & Engr. Ltd.** 1361 Huntingwood Drive, Unit 12 Scarborough Ontario M1S 3J1 (416) 293-7744 **Industrial Projects** 3300 Cavendish Blvd., Suite 145 Montreal Quebec H4B 2M8 (514) 489-5769

Fischer & Porter (Canada) Ltd. 134 Norfinch Dr. Downsview Ontario M3N 1X7 (416) 667-9800 Branches: #4-1485 Rupert Street North Vancouver British Columbia V7J 1G1 (604) 986-4145 TELEX: 04-352712 610-70 Avenue, #209 Calgary Alberta T2H 2J6 (403) 259-3425 TELEX: 038-27963 216-1294 Border Street Winnipeg Manitoba R3H 0M7 (204) 632-6321 TELEX: 07-57109 MFP Controls Limited 970 Montee de Liesse, Suite 200 Ville St-Laurent P.Q. H4T 1W7 (514) 332-6162 TELEX: 05-824681 Bedford Nova Scotia (902) 835-8353 TELEX: 019-23509

Fisher Controls Co. of Canada Ltd. P.O. Box 578 Woodstock Ontario N4S 7Z6 (519) 539-9892 Representatives: **Lakeside Controls Limited** R.R. #1 Hyde Park Ontario N0M 1Z0 (519) 472-6771 **Kambria Controls Limited** P.O. Box 6800 Concord Ontario L4K 1B6 (519) 669-9300 TELEX: 06-964542 **Kambria Controls Limited** 87 Magill Street Walden Industrial Park R.R. #1 Copper Cliff Ontario P0M 1N0 (705) 692-3693 TELEX: 067-7292 **Laurentide Controls (1978) Ltd.** 2909 Kepler Sts. Foy Quebec G1X 3V4 (418) 659-4523 TELEX: 051-31706 **Laurentide Controls (1978) Ltd.** 880 Selkirk Street P.O. Box 450 Pointe Claire Quebec H9R 4P3 (514) 697-9230 TELEX: 05-821591 **Atlantic Controls Ltd.** Champlain Center, Suite 100 725 Champlain Street Dieppe New Brunswick E1A 1P6 (506) 854-3588 TELEX: 014-2333 **Control Tech** 6-2166 Notre Dame Winnipeg Manitoba R3H 0K2 (204) 633-9197 TELEX: 07-57683 **Spartan Controls Limited** 2810 12 Street, N.E. Calgary Alberta T2P 1R3 (403) 230-4581 TELEX: 0382-1775 **Spartan Controls Limited** 8525 Davies Road Edmonton Alberta T6E 4N3 (403) 465-5231 TELEX: 037-2464 **Septre Controls** 498 Henderson Dr. Regina Sask. S4N 6E3 (306) 543-6925 TELEX: 071-2691 **Norpac Controls Limited** 30 Gostick Place North Vancouver B.C. V7M 3G3 (604) 980-5701 TELEX: 04-3523-83 **Fisher Controls Co.** 45 Cowansview Rd. Cambridge Ontario N1R 7L2 (519) 622-2240 TELEX: 069-59486 **Fisher Service Co.** 8724 53rd Ave. Edmonton Alberta T6E 5G2 (403) 468-4811 TELEX: 037-3539

Flair Hydronics (Canada) Ltd. P.O. Box 2089, 581 Hyde St. Prescott Ontario K0E 1T0 (613) 925-4263

Flakt Canada Ltd. P.O. Box 5060, Station F Ottawa Ontario K2C 3P9 (613) 226-3300

Fleming Ltd., S.W. 49 Howden Rd. Scarborough Ontario M1R 3C9 (416) 751-6011 Branches: Quebec (514) 336-4990 B.C. (604) 278-3785

Flexitallic Gasket Co. Inc. 155 Heller Place Bellmawr NJ 08031 (609) 931-2500

Fluid Data Inc. 1844 Lansdowne Ave. Merrick NY 11566 (516) 223-2190 Representatives: **Caltrol Ltd.** 2 Thorncliffe Park Drive Unit 21 Toronto Ontario M4H 1H2 (416) 423-0692 **Galvanic Analytical Systems** 9202 Horton Road, S.W. P.O. Box 8550, Sta. F. Calgary Alberta T2V 2X4 (403) 253-6576

Foster Wheeler Limited P.O. Box 3007 St. Catharines Ontario L2R 7B7 (416) 688-4434 Branches: P.O. Box 3007 3505 Fourteenth Street, S.W. Calgary Alberta T2T 3W2 (403) 243-8067 85 Richmond Street, West Suite 810 Toronto Ontario M5H 2C9 (416) 366-1901 262 East Esplanade, Unit 7 North Vancouver B.C. V7L 1A3 (604) 986-3457 666 Sherbrooke, Ouest, Suite 802 Montreal Quebec H3A 1E7 (514) 284-0026

Fostoria Industries, Inc. 1200 N. Main Street Fostoria Ohio 44830-0986 (419) 435-9201 **Representative: Nortron Industries, Ltd.** 1140 Tristar Drive Mississauga Ontario L5T 1H9 (416) 676-1300

Foxboro Canada Inc. 707 Dollard LaSalle Québec H8P 1S5 (514) 366-4210 Branches: 567 St. George Street Moncton N.B. E1E 2B9 (506) 855-5174 3289 Lenworth Drive Mississauga Ontario L4X 2B9 (416) 625-4111 102-894 St. James Street Winnipeg Manitoba R3G 3J7 (204) 775-8058 7911 Argyle Road Edmonton Alberta T6C 4A9 (403) 468-3025 Distributors: **2480 39th Avenue, N.E.** Calgary Alberta T2E 6X1 (403) 230-5988 **1410 Boundary Road** Vancouver B.C. V5K 4V3 (604) 291-7248

Fram Canada Inc. 305 Romeo St. Stratford Ontario N5A 6V4 (519) 271-3470

Frommelt Industries, Inc. 2455 Kerper Blvd., P.O. Box 658 Dubuque Iowa 52001 (319) 589-2736 **Distributor: Fibre-Metal Canada, Ltd.** 377 Olivewood Road Toronto Ontario M8Z 2Z8 (416) 239-4366

Fromson Heat Transfer Ltd. 77 Railside Road Don Mills Ontario M3A 1B2 (416) 447-5541

FTS Systems, Inc. P.O. Box 158 Stone Ridge NY 12484 (914) 687-7664 **Representative: Spectrex Ltd.** 5240 Ferrier, Suite 508 Montreal Quebec H4P 1L6

Fulton Boiler Works, Inc. P.O. Box 257 Port & Jefferson Streets Pulaskie N.Y. 13142 (315) 298-5121 Branch: 273A Bowes Road Concord Ontario L4K 1B1 (416) 669-4140

Furnac Electric Canada Ltd. 455 Steelcase Rd. East Markham Ontario L3R 1G3 (416) 475-1798 **Agents: CANSCO Agencies Ltd.** 3941 Grant Street Burnaby B.C. V5C 3N4 (604) 291-7252 TELEX: 04-354546 **Emmersales Ltd.** 55 Chandler Crescent Moncton New Brunswick E1E 3W6 (506) 855-1010 TELEX: 014-2875 **PDMC Electrical Sales Ltd.** 345 Isabey Street St. Laurent Quebec H4T 1Y2 (514) 342-6585 TELEX: 05-824999 **R.J.S. Electrical & Mechanical Sales Ltd.** 2300 Stevenage Drive, Bay #1 Ottawa Ontario K1G 3W3 (613) 526-1242 TELEX: 053-3927 **Western Electrical Technical Sales** 1115 Edmonton Trail N.E. Calgary Alberta T2E 3K3 (403) 230-4755 TELEX: 03-821403 **Western Electrical Technical Sales** 5207-20th Ave. Edmonton Alberta T6L 1J2 (403) 462-2851 TELEX: 037-2878 **Peter Stokes Agencies** 22 Ruttan Bay Winnipeg Manitoba R3T 0H6 (204) 475-8641 TELEX: 07-55614

Furnaco Industrial Supplies & Instr. Co. Ltd. 4520 rue De La Roche Montreal P.Q. H2J 3J6 (514) 527-1561

Futura Coatings, Inc. 9200 Latty Ave. Hazelwood MO 63042 (314) 521-4100

FX Systems Corporation 77 Cornell St. CPO Box 1818 Kingston NY 12401 (914) 338-0515

G

G & S Mill, Inc. 75 Otis St. Northborough MA 01532 (617) 393-9266 **Distributor: Energivert** 1252 Rte 170 St Gedeon, Lac St. Jean Quebec G0W 2P0 (418) 345-2484

Garland Commmercial Ranges Limited 1177 Kamato Road Mississauga Ontario L4W 1X4 (416) 624-0260 Branch: 436 Isabey Street Ville Ste-Laurent P.Q. H4T 1V3 (514) 735-6271

Gas Energy Inc. 195 Montague St. Brooklyn New York 11201 (212) 643-5163

Gates Canada Inc. 300 Henry St. Brantford Ontario N3T 5W1 (519) 759-4141 Branches: 114 Norfinch Drive, Unit #5 Downsview Ontario M3N 1X1 (416) 663-8130 3835 East First Ave. North Burnaby B.C. V5C 5T6 (604) 291-7704 Distributors: **505 Montpellier Blvd.** Montreal Quebec H4N 2G6 (514) 747-1168 **8315 Davies Road** Edmonton Alberta T6E 4N3 (403) 466-3168

Gaylord Regethermic Canada Ltd. 2570 Drew Rong. Mississauga Ontario L4T 3M6 (416) 676-1960

Gelber Pumps, Inc. 3721 W. Morse Ave. Lincolnwood IL 60645 (312) 673-5800 **Distributor: John Vissers Sales Co.** R.R. #2 Bradford Ontario L0G 1C0 (416) 877-4761

Gen-Tec Inc, 2625 Dalton Ste-Foy (Quebec) G1P 3S9 (418) 651-8000 Branch: 790 Boul. Laurentien suite 207 Montreal Quebec H4M 2M6 (514) 747-7594

General Scientific Equipment Co. P.O. Box 27309 Philadelphia Pa 19118-0255 (215) 424-1550

George Ellison Ltd. P.O. Box 280 Wellhead Lane Perry Barr Birmingham England B42 2TD (021) 356-4502 TELEX 339467 ELISON G

George Kelk Limited 48 Lesmill Road Don Mills Ontario M3B 2T5 (416) 445-5860

GLE Inc. 14 Connell Court Toronto Ontario M8Z 1E7 (416) 255-8161 **Representa-**

tive: **GLE Inc.** P.O. Box 80402 Burnaby B.C. V5H 3X6 (604) 435-4208 TELEX: 04-54542 GLE Inc. P.O. Box 896 Edmonton Alberta T5J 2L8 (403) 424-3837 TELEX: 06-967763 GLE Inc. P.O. Box 3629, Station B Calgary Alberta T2M 4M4 (403) 261-3837 TELEX: 06-967763 Smith, Patterson & Assoc. 489 Kensington St. Winnipeg Manitoba R3J 1J8 (204) 885-1376 TELEX: 07-587711 GLE Inc. R.R. #3 London Ontario N6A 4B7 (519) 473-2760 TELEX: 06-967763 GLE Inc. 11475 Cote de Liesse Suite 210 Dorval Quebec H9P 1B3 (514) 631-3486 TELEX: 05-822683 A.T. Dean & Associates P.O. Box 1604 Halifax Nova Scotia B3J 2Y3 (902) 469-9916 TELEX: 01-922854

Golden Triangle Windows Ltd. 888 Guelph St. Kitchener Ontario N2H 5Z6 (519) 579-3810

Gotaverken Energy Systems 73 Water St. N. Cambridge Ontario N1R 3B4 (519) 622-0440

Gould Inc., Industrial Controls Division 103 Broadway Bedford OH 44146 (216) 232-8200 **Distributor: NEECO Industries Ontario** 3077 Mainway Burlington Ontario L7R 4C5 (416) 335-1403 (416) 827-8000

Grace & Co. of Canada Ltd., W.R. 294 Clements Road West Ajax Ontario L1S 3C6 (416) 683-8561 Branches: 255 Lafleur Ave La Salle Quebec H8R 3H4 (514) 366-3362 14810-123rd Ave. Edmontdn Alberta T5L 2Y5 (403) 454-4511

Graham Company P.O. Box 160 Menomonee Falls WI 53051 (414) 251-1100 **Representative: Enterprise Ind. Products** 467 Speers Rd., Unit #12 Oakville Ontario L6K 3S4 (416) 844-2551

Graham Fiber Glass Limited 300 Main St. Erin Ontario N0B 1T0 1 (416) 453-1912

Graham Products Limited Box 2000 Inglewood Ontario L0N 1K0 (416) 457-5290

Great North Conservation Products Inc. Box 505 Markham Ontario L3P 3R1 (416) 294-5748

Grepon Ltd. 115 Bowes Rd., Unit 14B Concord Ontario L4K 1B1 669-5000

GSW Inc. 599 Hill Street W. Fergus Ontario N1M 2X1 (519) 843-1610 Branches: 8400 Cote de Liesse Ville St. Laurent P.Q. H4T 1G7 (514) 733-9554 1000 Powell Ave. Winnipeg Manitoba R3H 0H6 (204) 633-4424 7080 River Road Suite 219 Richmond B.C. (604) 270-3639

GTE Products Corp. One Stamford Forum Stamford CT 06904 (800) 221-3333 Branch: GTE Sylvania Canada Limited Electrical Equip. 1550 Birchmount Rd. Scarborough Ontario M1P 2H1

GTE Sylvania 35 Vulcan St. Rexdale Ontario M9W 1L3 (416) 247-6171 Branches: 4405 Robinwood Dr. Victoria B.C. V8N 5R7 (604) 721-1233 6102 Silver Ave. P.O. Box 80009 Burnaby B.C. V5H 2Y2 (604) 435-4151 TELEX 04-354560 106-3750 19th St. N.E. Calgary Alta. T2E 6V2 (403) 276-9921 TELEX 03-822719 14335-121A Ave. Edmonton Alta. T5L 2T1 (403) 252-8130 TELEX 03-72492 1237 Albert St. Regina Sask. S4R 2R5 (306) 352-2476 TELEX 07-12664 615-2nd Ave., N. Saskatoon Sask. S7K 2C7 (306) 242-7515 540 Marjorie St. Winnipeg Man. R3H 0S9 (204) 775-7123 TELEX 07-57694 837 Vimy St. North Bay Ont. P1B 5B6 (705) 472-5804 930 Commissioners Rd. East London Ont. N5Z 3J1 (519) 686-7000 2564 Cavendish Dr. Burlington Ont. L7P 4K3 (416) 335-6514 122 Forestwood Dr. Kitchener Ont. N2N 1B6 (519) 745-0212 P.O. Box 29 Bridgenorth Ont. K0L 1H0 (705) 292-9842 1704 Carling Ave. Ottawa Ont. K2A 1C7 (613) 722-3960 8750 Chemin de la cte de Liesse Montreal Que. H4T 1H3 (514) 736-4201 TELEX 05-825884 Bureau 210 2750 Chemin Ste-Foy Quebec Que. G1V 1V6 (418) 658-6936 145 Harvey Road Riverview N.B. E1B 2K2 (506) 386-5486 8 Ralston Ave. P.O. Box 539 Dartmouth N.S. B2Y 3Y8 (902) 463-7710 TELEX 01-931465 P.O. Box 436 Goulds Nfld. A0A 2K0 (709) 368-7001

Guaranty Performance Co. Inc. 1120 E. Main Independence KS 67301 (316) 331-0020

Guildline Instruments Limited 21 Gilroy Street Smiths Falls Ontario K7A 4S9 (613) 283-3000

Guth Lighting 2615 Washington P.O. Box 7079 St. Louis MO 63103 63177 (314) 533-3200 **Representative: Visioneering** 24 Ward Street M6H 4A6 Toronto Ontario (416) 534-7991

H

H.O.P. Consulab Inc. 415 Ave. Des Laurentides C.P. 5362 Beauport P.Q. G1E 6C3 (418) 661-3701

Hach Company P.O. Box 389 Loveland Colorado, U.S.A. 80539 (303) 669-3050 Representatives: **Sealand Sales Limited** 2960 West Fourth Ave. Vancouver B.C. V6K 1R4 (604) 736-9744 TELEX 04-508538 **Fryston Associates Co. Ltd.** 83 Galaxy Blvd. — Unit 3 Rexdale Ontario M9W 5X6 (416) 675-5626 TELEX 06-989537 **Distributor: John Meunier Inc.** 6290 Rue Perinault Cartierville Montreal Quebec H4K 1K5 (514) 334-7230 TELEX 05-826593

Hankison Corp. 1000 Philadelphia St. Canonsburg PA 15317 (412) 745-1555 Distributors: **Black & Baird Limited** 1362 Venables St. Vancouver B.C. V5L 2G4 (604) 251-2232 **Devilbiss (Canada) Limited** P.O. Box 3000 Barrie Ontario L4M 4V6 (705) 728-5501 **Aimark Travers Limited** P.O. Box 716, Station "B" Willowdale Ontario M2K 2P9 (416) 441-2354 **Eskins Tech** P.O. Box 308, A.M.F. Montreal Quebec H4Y 1A8 (514) 631-5993

Hanson Inc. 45 Vansco Road Toronto Ontario M8Z 5J7 (416) 255-1371

Haskel Inc. 100-94 East Graham Place Burbank CA 91502 (213) 843-4000 Distributors: **Applied Hydraulics Co.** 865 Wall Street Winnipeg Manitoba R3G 2T9 (204) 786-7436 TWX 0755182 **Delta Hydraulic Power** 8223 Davies Road Edmonton Alberta T6E 4N1 (403) 465-5491 **#28-970 Laval Crescent** Kamloops B.C. V2C 5P5 (604) 372-0744 **2231 Vauxhall Place** Richmond B.C. V6V 1Z5 (604) 278-4288 TELEX 04-357574 **N L Rucker Products** Unit No. 8, 711-48th Ave. Calgary Alberta T2G 4X2 (403) 243-4533 TWX 03924644 **8503 Davies Road** Edmonton Alberta T6E 4N3 (403) 465-7536 TWX 0372361 **Wainbee Limited** 731 Wilson Ave. Kitchener Ontario N2C 1J1 (519) 893-6750 **100 Bessemer Rd.** London Ontario N5E 1R2 (519) 681-6266 **3090 American Drive** Mississauga Ontario L4V 1S3 (416) 243-1900 TELEX 06-989463 **1590 Liverpool Ct.** Ottawa Ontario K1B 4L2 (613) 744-1720 **216 Brunswick Blvd.** Pt. Claire P.Q. H9R 4R7 (514) 697-8610 TWX 05821824 **1375 Guest Boul Charest** Quebec P.Q. G1N 2E7 (418) 683-1956 **8828 Selkirk St.** Vancouver B.C. V6P 4K1 (604) 266-8351 **2895 Walker Rd., Unit 4** Windsor Ontario N8W 3R2 (519) 966-4332

Hayes Dana P.O. Box 6000 Beamsville L0R 1B0 (416) 563-4991 Branches: Vancouver 156 W. 8th Ave. V5Y 1N2 (604) 879-5025 Calgary 2421 Centre Ave. S.E. T2E 0A9 (403) 248-1994 Toronto 7 Meridian Rd. Rexdale M9W 4Z6 (416) 675-1476 Montreal 17 Valois Bay Ave. Pte. Claire H9R 4B4 (514) 695-7602

Hayward Tyler One Vulcan Street Rexdale Ontario M9W 1L3 (416) 243-1400

HCP Industrial Sales P.O. Box 12 Pointe Claire Quebec H9R 4N5 (514) 636-8423

Heat Extractor Corporation P.O. Box 268 10 New Street St. Johnsville New York 13452 (518) 568-2288 **Representative: Brock Engineering Mfg. Co. Ltd.** 4305 Iberville Montreal P.Q. (514) 527-8071

Heat Pumps of Canada Limited P.O. Box 2045 Brantford Ontario N3T 5W5 (519) 756-2880

Heat Recovery of Montreal 270 St. Charles Road Beaconsfield P.Q. H9W 2X5 (514) 695-4598

Heat Seal Equipment 140 Milner Ave., Unit #30 Agincourt Ontario M1S 3R3 298-2111

Heat-Triever Systems 1246 High Street Fairport Harbor Ohio, U.S.A. 44077 (216) 357-0220 **Representative: Clawsey-Sohrt** 1297 Industrial Road Cambridge Ontario N3H 4T8 (519) 653-7129

Heating Alternatives Inc. P.O. Box 2078 Great Neck New York 11022 (516) 466-3475

Hecon Canada Inc. 80 Galaxy Blvd. Rexdale Ontario M9W 4Y8 (416) 675-3663 Branches: 1320 Graham Blvd. Montreal P.Q. H3P 3C8 (514) 737-3671 18124-107th Ave. Edmonton Alberta T5S 1K5 (403) 484-0513

Henlex 1300 Jules-Poitras Montreal H4N 1X8 (514) 337-3331

Henry Vogt Machine P.O. Box 1918 Louisville KY 40201 (502) 634-1511 Distributors: **Crane Canada Ltd.** Crane Supply Div. 293 Church St. Moncton NB **Fleck Brothers Ltd.** 110 Alexander St. Vancouver B.C. (604) 684-8131 **Lytle Specialties Ltd.** 10, 5925-12th St. S.E. Calgary Alberta T2H 2M3 (403) 259-4311 **Lytle Specialties Ltd.** P.O. Box 326 Dartmouth Nova Scotia (902) 466-2444 **Lytle Specialties Ltd.** 8405 Wagner Road Edmonton Alberta T6E 5A7 (403) 465-0711 **Lytle Specialties Ltd.** 6445 De Maisonneuve Blvd. Montreal Quebec H4B 2Z1 (514) 487-7820 **Lytle Specialties Ltd.** P.O. Box 2109 Sarnia Ontario N7T 4L1 (519) 344-8874 **Lytle Specialties Ltd.** 428 Milen Road Stoney Creek Ontario L8E 3N9 (416) 662-5522 **Lytle Specialties Ltd.** 86 Torlake Crescent Toronto Ontario M8Z 1C3 (416) 252-3181 **Lytle Specialties Ltd.** 102 King Edward St. East Winnipeg Manitoba R3H 0N8 **Utility & Industrial Supply Co.** (Canada Ltd.) P.O. Box 999 Sarnia Ontario N7T 7K6 (519) 344-3614

Hewlett Packard Canada Ltd. 6877 Goreway Dr. Mississauga Ontario L4V 1M8 (416) 678-9430

Hick Hargreaves and Co. Ltd. Crook Street Bolton England BL3 6DB Bolton (0204) 23373

Hirt Combustion Engineers 931 South Maple Avenue Montebello CA 90640 (213) 728-9164 **Representative: Thermeco**

Suppliers

Engineering Services Ltd. P.O. Box 569 Streetsville Ontario L5M 2C1 (416) 821-9700

Hoffman Engineering Company 9th & Tyler Street Anoka Minnesota 55303 (612) 421-2240 Representatives: **DCL Company Inc.** 173 William Roe Blvd. Newmarket Ontario L3Y 1B4 (416) 895-7189 **Eltron Enterprises Ltd.** 7583 Vantage Place Tilbury Ind. Park Delta British Columbia V4G 1A5 (604) 946-1271

Hoke Controls Ltd. 2240 Speers Road Oakville Ontario L6L 2X8 (416) 827-9807

Holmes Insulations Inc. P.O. Box 2079 561 Scott Road Sarnia Ontario N7T 7L4 (519) 336-7770

Holophane 1620 Steeles Avenue Brampton Ontario L6T 1A5 (416) 793-3111 Branches: 8368 Bougainville Montreal Que. H4P 2G3 (514) 735-5906 18 Warrender Ave. Islington Ontario M9B 5Z2 (416) 233-9871 1520 Crestlawn Dr. Burnaby B.C. V5B 3K1 (604) 291-9079

Honeywell Braukmann Inc. 5601 Steeles Avenue West Weston Ontario M9L 1S7 (416) 749-8491

Honeywell Ltd. 155 Gordon Baker Rd. Willowdale Ontario M2H 3N7 499-6111

Hunt & Moscrop (Canada) Inc. P.O. Box 355 Granby Que. J2G 8E5 (514) 378-2655 **Representative: Canada Fans** P.O. Box 1350 Picton Ontario K0K 2T0 (613) 476-2150

Hunter Enterprises Orillia Ltd. Box 400 Orillia Ontario L3V 6K1 (705) 325-6111

Hy-Cal Engineering 9650 Telstar Ave. El Monte CA 91731 (213) 444-4000 **Representative: Intertechnology** P.O. Box 219 Scarsdale #1 Don Mills Ontario M3C 2S4 (416) 445-5500

I

I.F. Industries Inc. 1426 Wallace Rd. Oakville Ontario L6L 2Y2 (416) 827-6358

ICG Canadian Propane Ltd. 112 Basaltic Rd. Box 670 Maple Ontario L0J 1E0 (416) 667-0770

ICG Manufacturing Ltd. Inter-City Gas Building 444 St. Mary Avenue Winnipeg Manitoba R3C 3T7 (204) 944-9920 Branches: 695 Berry Street Winnipeg Manitoba (204) 786-6552 340 Welland Avenue St. Catharines Ontario (416) 682-8621 1065 Avenue Perron Laval Quebec (514) 622-5525 2610-3rd Avenue, N.E. Calgary Alberta (403) 273-7800 1395 Spruce St. Winnipeg Manitoba (204) 774-1831 442 Limestone Crescent Toronto Ontario (416) 661-4896

IDH Eng. Products Inc. 110 Babcombe Dr. Thornhill Ontario L3T 1N1 (416) 886-2210

IDI Electric (Canada) Ltd. 33 Fuller Road Ajax Ontario L1S 2E1 (416) 683-3400 TELEX 06981299

Illinois Water Treatment Company 4669 Shephard Trail Rockford IL., U.S.A. (815) 877-3041

Indusco Engineering 48 Chauncey Ave. Toronto Ontario M8Z 2Z4 (416) 231-9377

Industrial Air Inc. P.O. Box 215 Amelia OH 45102 (513) 753-5280 **Representative: Mark Hot Inc.** 400 Place Trans-Canada Longueuil Quebec J4G 1N9 (514) 670-4060

Industronics Inc. 489 Sullivan Ave. P.O. Box G South Windsor CT., U.S.A. 06074 (203) 289-1551 TELEX 643224

Inficon Systems Ltd. 498 Main St. E. Hamilton Ontario L8N 1K7 (416) 528-9225

Infranor Canada Inc. 5650 Trudeau St. Hyacinthe Qué. J2S 1H4 (514) 464-0081

Infrascan Inc. 207-7080 River Rd. Richmond B.C. V6X 1X5 (604) 273-8655

Ingersoll-Rand Canada Inc. 3950 Cote Vertu St. Laurent Quebec H4R 2J4 (514) 335-0650 Branches: 630 Dorchester Blvd. W. Montreal Quebec H3B 1S6 333-11th Avenue Calgary Alberta T2R 0C7 255 Lesmill Road Don Mills Ontario M3B 2V1 444 Barrydowne Road Sudbury Ontario P3A 3T3 1695 Main Street Vancouver B.C. V6A 2W7 3950 Cote Vertu St. Laurent Quebec H4R 2J4

Inproheat Industries 680 Raymur Avenue Vancouver British Columbia V6A 2R1 (604) 254-0461 Branches: #201, 11349-166A Street Edmonton Alberta T5M 3W4 (403) 451-4303 1300 St. James Street Winnipeg Manitoba (204) 772-2875

Inservac Limited 250 Rayette Rd. Concord Ontario L4K 1B1 (416) 669-5111

Insta-Foam Products Inc. 1500 Cedarwood Dr. Joliet IL 60435 (815) 741-6800 **Agent: Insta-foam Products** P.O. Box 21 Etobicoke Ontario M9C 4V2 (416) 622-6844

Instrumentation & Control Systems Inc. 520 Interstate Rd. Addison IL 60101 (312) 543-6200

Instruments Champagne Int'l. 53-15th Street Roxboro P.Q. H8Y 1N7 (514) 684-3198

Insul-Coustic Inc. 2766 Fenton Road Box 925 R.R. #5 Ottawa Ontario K1G 3N3 (613) 822-2225 TELEX 053-4592 Branch: 930 Rue Begin St. Laurent P.Q. H4M 2N5 (514) 337-2151 TELEX 05-824004

Insul-Glass Limited Box 5100, Stn. 'F' Ottawa Ontario K2C 3G8 (613) 226-4111

International Water Saver Inc. P.O. Box 452 Wellington Ontario K0K 3L0

Intertechnology Limited 1 Scarsdale Road Don Mills Ontario M3B 2R2 (416) 445-5500 Branches: 3869 Boul Des Sources Dollard Des Ormeaux Quebec H9B 2A2 (514) 683-0930 856 Connaught Ave. Ottawa Ontario K2M 5M6 (613) 920-5669 Suite 3040 Bow Valley Square II Calgary Alberta T2P 2W7 (403) 265-8552 Suite 180 10751 Shellbridge Way Richmond British Columbia V6X 2W8 (604) 270-9538

Intralec PO Box 519 Thornhill Ontario L3T 4A2 Toronto (416) 669-1150 INWATS 1-800-268-0776

IRD Mechanalysis Limited 333 Barton Street East Stoney Creek Ontario L8E 2L1 (416) 662-7577

Isolation Systems 1631 The Queensway Toronto Ontario M8Z 5Y4 (416) 259-5401

Isometals Inc. 1720 Cunard Chomedy Laval P.Q. H7S 2B2 (514) 687-1341

ITT Fluid Products Canada 55 Royal Road Guelph Ontario N1H 1T1 (519) 821-1900 Branches: 235 Cote Vertu Rd. Suite 138 Montreal Quebec H4N 1C8 (514) 336-7660 3335-23rd St. N.E. Calgary Alberta T2E 6V8 (403) 230-1426 #200-1294 Border St. Winnipeg Manitoba R3H 0M7 (204) 633-6296

ITT Reznor McKenley Ave. Mercer PA 16137 (412) 662-4400 **Representative: A.G. Hubert & Assoc. Inc.** #10 Sideroad R.R. #5 Milton Ontario L9T 2Y3 (416) 878-0596

ITT Vulcan Electric Kezar Falls Maine 04047 (207) 625-3231 Distributors: **Elkon Electrical Co., Ltd.** 1961-55th Ave. Dorval Quebec H9P 1G9 (514) 636-0510 **Elkon Electrical Co. Ltd.** #3-490 McNicoll St. Willowdale, Toronto Ontario M2H 2E1 (416) 497-2842

J

J-Tak 1366 Spruce St. Winnipeg MB R3E 2V7 (204) 774-2571

J.H. Lock and Sons Limited 150 Perth Ave. Toronto Ontario M6P 3X4 (416) 531-1186 Branches: Windmill Place 1000 Windmill Road Dartmouth Industrial Park, Burnside Dartmouth Nova Scotia B3B 1L7 (902) 469-6642 TELEX 019-22639 661 Rose de Lima Montreal Quebec H4C 2L7 (514) 931-7254 TELEX 05-267504 2907-18th Street, N.E. Calgary Alberta T2E 7K5 (403) 276-9944 TELEX 038-25546 Cory Lock Ltd. 278 Olafson Avenue Richmond B.C. V6X 2R3 (604) 273-1531

Jacobs & Thompson Inc. 89 Kenhar Drive Weston Ontario M9L 2R3 (416) 749-0600 Branch: 2465 de la Province Longueuil Quebec J4G 1G3 (514) 677-9166

Jo-Bell Products Inc. 5456 West 111th Street Oak Lawn IL 60453 (312) 425-0240 Distributors: **A.M. Tower Inc.** 25 Westminster Ave. So. Montreal, West Quebec H4X 1Y6 (514) 481-0221 **Hydroflo Eqpt. Specialties Ltd.** 4917-99th St. Edmonton Alberta T6E 4Y1 (403) 437-1166 **Hydroflo Eqpt. Specialties Ltd.** 4216-10th St. N.E. Calgary Alberta T2E 6K3 (403) 276-8896

John Brown Engineering Clydebank Dunbartonshire Scotland GB1 1YA (041) 952-2030 Agent: 20 Victoria Street Suite 505 Toronto Ontario M5C 2M8 (416) 364-3755

John C. Ernst Co. 171 Ridgedale Ave. Morristown NJ 07960 (201) 539-0300 **Representative: Higginson Equipment Sales Ltd.** 1131 Pettit Road Burlington Ontario L7R 3Z4 335-2211

John C. Preston 500 University Avenue 10th Floor Toronto Ontario M5G 1V7 (416) 598-3540

John Wood 101 Hanson St. Toronto Ontario M4C 1A2 (416) 691-9100 Branch: 3450 Wellington Ave. Vancouver B.C. V5R 4Y4 (604) 980-9044

Johnson Controls Limited Control Prod. Div. 929 Warden Ave. Scarborough Ontario M1L 4C6 755-1137 Branch: 441 LeBeau Blvd. Montreal P.Q. H4N 1S2 (514) 331-7121 **Agents: Hasick Agencies Ltd.** 33 Colleen Cresc. S.W. Calgary Alberta T2V 2R4 (403) 252-7396 **Hasick Agencies Ltd.** 205-3755 W. 6th Ave. Vancouver B.C. V6R 1T9

Johnson Controls Ltd. Systems & Services 120 Bermondsey Road Toronto Ontario M4A 1X6 (416) 757-2821

Johnson Corporation 805 Wood St. Three Rivers MI., U.S.A. 49093 (616) 278-1715 Representstives: **General Equip-**

ment Ltd. 15 East 4th Avenue Vancouver British Columbia V5T 1G1 (604) 876-8881 Calgary (403) 423-4488 Edmonton (403) 252-9941 Saskatoon (306) 525-5264 Winnipeg (204) 453-4745 **Dry-Con Inc.** 840 Halpern Ave. Dorval Quebec H9P 1G6 (514) 636-1007 **Rexdale** Ontario (416) 675-7008

Johnson Paterson Ltd. 210 Denison St. Markham Ontario L3R 1B6 499-4822

K

Kahlsico Int'nl. Corp. P.O. Box 947 California 92022 (714) 444-2158 **Distributor: MSE Engineering Ltd.** 265 Canarctic Dr. Downsview Ontario M3J 2N7

Kahn and Company 885 Wells Road Wethersfield CT 06109 (203) 529-8643 **Representative: Arthur S. Leitch** 999 William Street Midland Ontario L4R 4L7 (705) 526-5496

Kalglo Electronics Co. Inc. 6584 Ruch Rd. E. Allen Twp. Bethlehem PA 18017

Kathabar Systems Box 791 New Brunswick NJ 08903 (201) 356-6000 **Distributor: Western Air Conditioning Ltd.** 10441-123rd St. Edmonton Alberta T5N 1N8

Keene Lighting 455 Dobbie Dr. Cambridge Ontario N1R 5X9 (519) 623-8820

KeepRite Inc. 44 Elgin St. Brantford Ontario N3T 5PA (519) 753-8471 Branches: 1777 West 8th Ave. Vancouver B.C. V6J 1V8 (604) 738-0611 TELEX 04-51697 11434-168 St. Edmonton Alberta T5M 3T9 (403) 453-5155 TELEX 037-3725 2320-35th Ave. N.E. Calgary Alberta T2E 6S9 (403) 277-9688 TELEX 038-26753 210-3111 Portage Ave. Winnipeg Manitoba R3K 0W4 (204) 888-2533 TELEX 07-57433 1030 Clarke Side Rd. London Ontario N6A 4P4 (519) 451-0230 TELEX 064-5664 2289 Fairview St. Burlington Ontario L7R 2E3 (416) 637-8241 150 Consumers Rd. Toronto Ontario M2J 1P9 (416) 492-1444 TELEX 06-966727 Ate Vartu Montreal P.Q. H4R 2B7 (514) 337-8040 TELEX 05-825881 80 Colonnade Rd. Ottawa Ontario K2E 7L2 (613) 226-7813 65Y Akerley Blvd. Dartmouth N.S. B3B 1RZ (902) 463-6670 TELEX 019-31604

Kelley Company Inc. 6720 N. Teutonia Ave. Milwaukee Wisconsin, U.S.A. 35209 (414) 352-1000 Branch: Roger A. Kent Ltd. 1080 Fewster Dr., Unit 2 Mississauga Ontario L4W 2T2 (416) 625-8146

Kenscott Limited 2341A Keele Street Toronto Ontario M6M 4A3 245-4055

Kerdon Mfg. Ltd. 76 Tidefall Dr. Agincourt Ontario M1W 1J2 (416) 497-3276

Kerr Controls Limited P.O. Box 1500 24 Court Street Truro Nova Scotia B2N 5V2 (902) 895-9281 Branches: 3607 Strawberry Hill Halifax Nova Scotia B3K 5A8 (902) 455-7248 81 MacAulays Drive Sydney Nova Scotia B1P 3Z8 (902) 539-2660 61 Halifax Street P.O. Box 2155, Postal Stn. A. Moncton New Brunswick E1C 8J1 (506) 855-5741 386 Rothesay Ave. Saint John New Brunswick E2J 2C3 (506) 693-4170 35 Maple Valley Road Corner Brook Newfoundland A2H 3C4 (709) 634-5323 683 Water Street St. John's Newfoundland A1C 2R6 (709) 753-1670

King Co. 1001-21st Ave. N.W. P.O. Box 287 Owatonna Minnesota 55060 (507) 451-3770 Distributors: **McCulloch Engineering Ltd.** P.O. Box 455 Bolton Ontario L0P 1A0 (416) 857-3200 **Henlex Inc.** 1300 Jules Poitras St. Laurent Quebec H4N 1X8 (514) 337-6893

Kingman Industries 3133 Sumner Avenue Burnaby B.C. V5G 3E3 (604) 435-8175

Kleen-Flo Tumbler Industries 75 Advance Blvd. Brampton Ontario L6T 4N1 (416) 793-4311 Branches: 1977 Notre-Dame de Fatime Duvernay Quebec H7G 4R9 (514) 382-6713 2196 Douglas Road Burnaby B.C. V5C 5A7 (604) 294-6661

Klockner Moeller Ltd. 3525 Nashua Dr. Mississauga Ontario L4V 1R1 (416) 677-2851 Branches: 915 boul. Pierre Bertrand Quebec Quebec G1M 2E7 (418) 681-8163 9386 Viau Blvd. St. Leonard Quebec H1R 3B5 (514) 325-4307 372 rue McArthur Ville St. Laurent Quebec H4T 1X8 (514) 739-1906 455 Milner Ave. Scarborough Ontario M1B 2K4 (416) 298-6440 56 Bramalea Rd. Bramalea Ontario L6T 3S6 (416) 791-1722 144-146 South Service Road Stoney Creek Ontario L8E 3H6 (416) 560-0511 1641 Dublin Ave. Winnipeg Manitoba R3H 0G9 (204) 633-6140 7008K-5th St. S.E. Calgary Alberta T2H 2G3 (403) 253-0395 875 East Cordova St. Vancouver B.C. V6A 3R2 (604) 251-2241

Konus Systems Inc. Suite 144 2121 Newmarket Pkwy. Marietta Georgia 30067 (404) 955-9335 **Representative: QM Energy Systems Ltd.** P.O. Box 1868 975-3rd Ave. Prince George British Columbia (604) 563-3604 **Agent: Thermaco Engineering Svc. Ltd.** P.O. Box 569 Streetsville Ontario L5M 2C1 (416) 821-9700

Koolshade Corporation 722 Genevieve St. P.O. Box 210 Solana Beach California **Distributor: Window Insulation Specialists Co.** 1662 Bonhill Rd. #15 Mississauga Ontario L5T 1E1 671-2242 **Representative: Sungard** 70 Nebo Road, Unit 4 Hamilton Ontario

KSM Canada Ltd. 425 Attwell Dr. Rexdale Ontario M9W 5C4 (416) 675-3650

L

L-K Metal Products Co. Ltd. 1595 Lincoln Rd. P.O. Box 1180 Windsor Ontario N9A 6R1 (519) 256-1861

Lakeshore Electric Corp. 205 Willis St. Bedford Ohio 44146 (216) 232-0200 **Distributor: Sytrolec Controls Ltd.** 5171 Amiens St. Montreal N. Quebec H1G 3G4 (514) 324-8991

Lakewood Stove Co. Ltd. Box 489 Bobcaygeon Ontario K0M 1A0 (705) 738-2349

Land Instruments Inc. Fox & Main St. Tullytown PA 19007 (215) 943-7882 **Distributor: Thermo Kinetics** 69 Westmore Dr., Unit 7 Rexdale Ontario M9V 3Y6 (416) 741-5794

Lawson Taylor Inc. 42 Laird Drive Toronto Ontario M4G 3T2 (416) 425-4244

Leader Fan Ind. Ltd. 10 Dansk Court, Unit 9 Rexdale Ontario M9W 5T8 (416) 675-1477

Leco Instruments Ltd. 5151 Everest Dr. Mississauga Ontario L4W 2R2 (416) 624-6933 Branch: 650 Rue Giffard Longueil Quebec J4G 1T8 (514) 651-5026

Leeds & Northrup Canada 41 Constellation Court Rexdale Ontario M9W 1K4 (416) 675-7700 Branches: #104-2845-23rd St. N.E. Calgary Alberta J2E 7A4 (403) 230-1878 3929 Taschereau Blvd. St. Hubert P.Q. J4T 2G5 (514) 861-2815

Leeson Electric Corp. P.O. Box 241 Grafton WI 53024 (414) 377-8810 Branch: 1222 Aimco Boulevard Mississauga Ontario L4W 1B2 (416) 625-5444

Lennox Industries (Canada) Ltd. 400 Norris Glen Road Etobicoke Ontario M9C 1H5 (416) 621-9302 Branches: 3916-70th Avenue South East Calgary Alberta T2H 1X8 (403) 279-7577 9751 Van Horne Way Richmond B.C. B6X 1W4 (604) 273-7704 8904-18th Street Edmonton Alberta T6C 4G1 (403) 464-1555 969 Sherwin Road Winnipeg Manitoba R3H 0T8 (204) 633-0299 1020 Rue Beaulac St. Laurent P.Q. H4R 1R7 (514) 336-8440 Bay 113A 2535 Blackwell Street Ottawa Ontario K1B 4E4 (613) 745-1527 10 Akerley Blvd. Suite #4 Dartmouth N.S. B3B 1J4 (902) 463-9476 145 The West Mall Etobicoke Ontario M9C 1C3 (416) 622-0515

Leonard Electric (1981) Limited 1008 Rangeview Rd. Mississauga Ontario L5E 1H3 (416) 274-3454

Les Industries 1035 Panneton Sherbrooke Que. J1K 2B3 (819) 563-7331

Leslie International Unit C-10, 1515 Matheson Blvd. Mississauga Ontario L4W 2P5 (416) 625-5486 Representatives: **Olympic International Agencies Ltd.** 1591 Bowser Avenue North Vancouver B.C. V7P 2Y4 (604) 987-2291 TELEX 04352543 **Cth Instruments (Western) Ltd.** 8909-20th Street Edmonton Alberta T6C 4J5 (403) 467-1809 TELEX 03741668 **Preston Phipps Equipment Ltd.** 315 Bering Ave. Toronto Ontario M8Z 3A5 (416) 239-2315 TELEX 06984566 **Mentec Industrial Equipment Ltd.** 6535 Millcreek, Unit 45 Mississauga Ontario L5N 2M2 (416) 821-9600 TELEX 06218581 **Robertson White Engineering Ltd.** 20 Victoria Street, Suite 505 Toronto Ontario M5C 2M8 (416) 364-3755 TELEX 06-52485 **B Fortin (1977) Inc.** 5165 Metropolitain East Montreal Quebec H1R 1Z7 (514) 324-5283 TELEX 05828633 **Cth Instruments Central Ltd.** 156 St. Denis Street St. Lambert P.Q. J4P 2G2 (514) 671-9396 TELEX 0527377 **Cth Instruments Ltd.** 10 Akerley Blvd. Suite 36 Dartmouth Nova Scotia B3B 1J4 (902) 469-6832 TELEX 01931426 **Preston Phipps Equipment Ltd.** 1149 Vanier Rd. Unit 2 Sarnia Ontario N7S 3Y6 (519) 344-9791 **Preston Phipps Equipment Ltd.** Ottawa Railway Station 200 Tremblay Road Ottawa Ontario K1G 3H5 (613) 236-5774 TELEX 0534132 **Mentec Industrial Equipment Ltd.** 1149 Vanier Rd., Unit 3 Sarnia Ontario N7S 3Y4 (519) 336-9512

Levell Electronics Ltd. Moxon Street Barnet Herts, England EN5 5SD 01-449-5028

Levitt-Safety Limited 33 Laird Drive Toronto Ontario M4G 3S9 (416) 425-8700 Branches: Kitchener Ontario (519) 894-1770-1 Ottawa Ontario (613) 225-9550 Sudbury Ontario (705) 560-2445-6 Thunder Bay Ontario (807) 623-6484 Sarnia Ontario (519) 336-8530 Stoney Creek Ontario (416) 662-2905 London Ontario (519) 451-3010 St. Catherines Ontario (416) 685-7397 Winnipeg Manitoba (204) 633-7228 Edmonton Alberta (403) 436-3730 Fort McMurray Alberta (403) 743-8573 Calgary Alberta (403) 243-4273 Vancouver B.C. (604) 879-4561 Prince George B.C. (604) 563-1619 Regina Saskatchewan (306) 543-7455 Dorval Que. (514) 636-9011 Sept. Iles Que. (418) 962-2541 Arvida Que. (418) 548-3150 Moncton N.B. (506) 382-2559 Dartmouth N.S. (902) 463-1303 St. John's Nfld. (709) 722-5690

Suppliers

Libbey Company, W.S. 1 Mill Street Lewiston Maine, U.S.A. 04240 (207) 784-6961 Distributors: **Correpro Ltd.** 8114 Trans Canadienne St. Laurent Quebec H4S 1M5 (514) 337-3911 **Tesh Insul-Fabricators Ltd.** 3815-67 Ave. N.E., R.R. #6 Calgary Alberta T2M 4L5 (403) 285-3727

Liebert Corporation 1050 Dearborn Drive P.O. 29186 Columbus Ohio 43229 (614) 888-0246 **Distributor: Jo-Ad Industries** 76 Hymus Blvd. Pointe Claire Quebec H9R 1E3 (514) 695-0660

Lightlux Prod. Inc. 783 Lawrence Ave. W. Toronto Ontario M6A 1C2 781-9329

Lightolier Canada Inc. 3015 Louis A. Amos Lachine P.Q. H8T 1C4 (514) 636-0670 Branches: 1739 Orangebrook Court Pickering Ontario L1W 3G8 (416) 831-2525 17303-105 Avenue Edmonton Alberta T5S 1H2 (403) 483-1476 2736 S.E. Marine Drive Vancouver B.C. V5S 2H1 (604) 437-0417

Liquiflame 50 Ashwarren Road Downsview Ontario M3J 1Z5 (416) 630-1240

Liquitrol Ltd. 4186 Courtrai #182 Montreal Que. H3S 1C3 739-1432

Lisi Aero Guide Inc. 7747 Valdombre St. St. Leonard Que. H1S 2V6 (514) 254-7533 Branches: 1001 Rte De L'Eglise Ste. Foy Que. G1V 3V7 (418) 656-6007 415 Racine St. East Chicoutimi Que. G7H 1S8 (418) 549-0481

Lisle-Metrix Ltd. 49 Sheffield St. Toronto Ontario M6M 3E5 (416) 249-9151 Representatives: **Quontime Inc.** Post Office Box 201 Snowdon Post Office Montreal Quebec H3X 3T4 (514) 937-3914-5 TELEX 055-66268 **Qunntime Inc.** Post Offices Box 952 Armdale Postal Station Halifax Nova Scotia B3L 4K9 (902) 425-5900 **Sarnia Piping Specialties Limited** 510 Williams Drive Chippewa Industrial Park Post Office Box 2018 Sarnia Ontario N7T 7L1 (519) 336-8820 TELEX 064-76210 **Ramsey Lake Industrial Limited** Walden Plaza, Unit #9 Post Office Box 158 Lively Ontario P0M 2E0 (705) 692-4734 TELEX 067-7156 **Pyramid Measurement & Controls Ltd.** 364-B East Esplanade North Vancouver British Columbia V7L 1A4 (604) 986-1568 TELEX 043-52559 **CB Engineering Limited** #1-6320-11th Street S.E. Calgary Alberta T2H 2L7 (403) 259-6220 TELEX 038-24812 **CB Engineering Limited** 308-9945-50th Street Edmonton Alberta T6A 0L4 (403) 465-9370 TELEX 037-43133

Loewen Millwork Box 2260 Steinbach Manitoba R0A 2A0 (204) 326-6446 Branches: 2642 Millar Ave. Box 5027 Saskatoon Saskatchewan S7K 4E3 (306) 652-2095 11930-115 Ave. Edmonton Alberta T4G 0L9 (403) 452-3750 3915-78 Ave. S.E. Calgary Alberta T2C 2J6 (403) 279-5046

Longhill Combustion Products Ltd. 95 Newkirk Rd. S. Richmond Hill Ontario L4C 2C6 (416) 883-1555

Loran Cook Company 2015 East Dale Street Springfield Missouri 65803 (417) 869-6474 Representatives: **Air Distribution Equipment Inc.** 10780 Boul. Pascal Gagnon Montreal-Nord Quebec H1P 1Z8 (514) 324-1471 **Cometal Inc.** 11 Rue Dumais St. Romuald CTE-Levis Quebec G6V 7M5 (418) 839-8831 Branches: KAV-AIR Products #81 Glencameron Road Thornhill Ontario L3T 2C0 (416) 881-9990 **Diamond Mechanical Distributors** Suite 4, Bedford Trade Mart 99 Rocky Lake Drive Bedford Nova Scotia B4A 2T3 (902) 835-7359 **Kenco Sales** P.O. Box 839 Rothesay New Brunswick E0G 2W0 (506) 847-7597

J.R. Stephenson Ltd. 555 Madison Street Winnipeg Manitoba R3H 0I6 (204) 775-8561 **J.R. Stephenson Ltd.** 1075 Mcdonald Street Regina Saskatchewan S4N 2X9 (306) 569-0654 **Sanitherm Engineering Ltd.** 767 Powell Street Vancouver B.C. V6A 1H5 (604) 253-4341 **Sinclair Supplies Ltd.** 10820-119 Street Edmonton Alberta T5L 4J6 (403) 452-3110 **Sinclair Supplies Ltd.** 523 Cleveland Cres. SE Calgary Alberta T2G 4R8 (403) 243-7800 **R.L. Fulton Company** P.O. Box 12060 Station A St. Johns Newfoundland A1B 3T5 (709) 753-3760 **J.R. Stephenson Ltd.** 401-44th St. East Saskatoon Saskatchewan S7K 0V9 (306) 242-1231

Luxo Lamp Ltd. 30 Place Sicard Ste-Therese Quebec J7E 3X6 (514) 430-5051 Branch: 32 Voyager Court South Toronto Ontario (416) 675-6310

M

M.H. Rhodes 99 Thompson Road Avon Connecticut 06001

Mac Victor Mfg. P.O. Box 1729, 840 Florence Ave. Concord N.C. 28025 (704) 786-7162

MacDonald Process Equipment Ltd. 133-2 The West Mall Etobicoke Ontario M9C 1C2 (416) 626-7300

MacLeod & Grant Ltd. P.O. Box 809, 106 Mackay St. Stellarton N.S. B0K 1S0 752-7522

Magnor Inc. 190 Boul. Industriel Boucherville Québec J4B 2X3 (514) 655-1344

Makinson Winchester Inc. 5100 St. Francois Rd. St. Laurent Quebec H4S 1J8 (514) 334-1050 **Agents: Donaldson, Pyrch & Hume Ltd.** 3920 Grant Street Burnaby B.C. V5C 3N3 **Donaldson, Pyrch & Hume Ltd.** 595 Ongenman Road, Bay 9 Prince George B.C. **C.P.H. Industries Div.** #16, 1935-30th Ave. N.E. Calgary Alberta T2E 6Z5 **D.P.H. Industries Div.** 8815-50th Avenue Edmonton Alberta T6E 5H4 **Paul Greenough Sales** P.O. Box 8151, Station A, Halifax N.S. B3K 5L9 **Warco Specialties Inc.** 1243A Kingsway Vancouver B.C. V5V 3E2

Mannesmann Demag Ltd. 2400 Royal Windsor Drive Mississauga Ontario L5J 1K7 (416) 823-4500 Branches: 7720 Anvil Way Surrey B.C. V3W 4H7 (604) 596-7422 2700 Sabourin St. Laurent P.Q. H4S 1M2 (514) 336-5556 199 Omands Creek Blvd. Winnipeg Manitoba R2R 1V9 (204) 632-9906

Manning Technologies Inc. 100 Technology Circle Scotts Valley CA 95066 (408) 438-3900 Representatives: **Fielding Crossman & Assoc.** 606 Gordon Baker Road Willowdale Ontario M2H 3B4 (416) 497-9111 **John Meunier, Inc.** Case Postale 70, Succ. Cartierville Montreal P.Q. H4K 2J4 (514) 334-7230 **Sealand Sales Ltd.** 2960 West 4th Ave. Vancouver B.C. V6K 1R4 (604) 736-9744

Marathon Electric 100 E. Randolph St. Wausau Wisconsin 54401 (715) 675-3311 **Representative: Phelan Brothers** 55 Healey Rd. Bolton Ontario L0P 1A0 (416) 857-2720

Margaux Controls Canada Inc. 1200 Aerowood Drive, Unit #7 Mississauga Ontario L4W 2S7 (416) 624-5722 Branch: P.O. Box 3510, Station B Fredericton New Brunswick E3A 5J8 (506) 454-4201

Mark Hot Inc. 400 Place Trans-Canada Longueuil Quebec J4G 1N9 (514) 670-4050 Branches: 235 Commercial Drive Vancouver B.C. V5L 4X1 (604) 253-8441 TELEX 04-51426 4009-4th Street S.E. Calgary Alberta T2G 2W4 (403) 287-1572 TELEX 038-24594 9232-27th Avenue Edmonton Alberta T6N 1B2 (403) 463-1133 TELEX 037-2582 1129 Empress Street Winnipeg Manitoba R3E 3H1 (204) 783-7051 TELEX 07-57514 6471 Northam Drive Mississauga Ontario L4V 1J2 (416) 677-6500 TELEX 06-968608 ZENITH LINE: 63220 20, rue St-Jean Québec P.Q. G1R 1N6 (418) 524-3074 1445 Woodroffe Avenue Nepean Ontario K2G 1W1 (613) 226-6726 TELEX 053-3814 1600 Bedford Highway, Suite 212 Sunnyside Place Bedford N.S. B4A 1E8 (902) 835-7116 (902) 835-7117 TELEX 019-22554

Markel Corporation P.O. Box 752 Norristown PA 19404 (215) 272-8960 Branch: Marflex Limited 2410 Dunwin Drive Mississauga Ontario L5L 1J9 (416) 828-0220

Markko Construction 195 Kennedy Road South, Suite 309 Brampton Ontario L6W 3H2 (416) 453-4325

Markland Specialty Engineering Ltd. Box 145 Etobicoke Ontario M9C 4U2 (416) 625-0930 **Agent: Pyramid Measurement & Controls Ltd.** 364-B East Esplanade North Vancouver B.C. V7L 1A4

Marsh Instrument Canada 397 Humberline Dr. #8 Rexdale Ontario M9W 5T5 (416) 675-1727 Branch: 4133-98th Street Edmonton Alberta T6E 5N5 (403) 463-7055

Martin Oakwood Ltd. 3610 Nashua Drive Mississauga Ontario L4V 1L2 (416) 677-8900

Masonellan Canada Ltd. 1135 North Service Road East Oakville Ontario L6H 1A7 (416) 844-2690 Branches: 212-6025 12th Street S.E. Calgary Alberta T2H 2K1 (403) 255-4496 4922-89 St. Edmonton Alberta T6E 5K1 (403) 465-7882 Representatives: **Controvalve Inc.** P.O. Box 43, Stn. A Fredericton N.B. (506) 455-1111 **Controvalve Equipment Inc.** 1610-8 Provencear Brossard Quebec J4W 2T9 (514) 465-3330 **Cantrols Equipment** 2410 Tedlo Street Mississauga Ontario L5A 3V3 (416) 275-1571 **Cantrols Equipment** 317 Adelaide St. London Ontario N5Z 3L3 (519) 681-9390 **Fintec Ltd.** 2410 Tedlo St. Mississauga Ontario L5A 3V3 (416) 270-6051 **Northern Columbia Process & Equipment Ltd.** 1234 Marine Drive Vancouver B.C. V7P 1T2 (604) 987-7194

Material Control, Inc. One Smoke Tree Plaza, Suite 115 North Aurora Illinois 60542 (312) 892-4275

Matheson P.O. Box 89 (530 Watson St. E.) Whitby Ontario L1N 5R9 (416) 668-3397 Branch: 12143-68th St. Edmonton Alberta T5B 4K6 (403) 471-4036

Maxon Corporation 201 East 18th Street Muncie Indiana 47302 (317) 284-3304 Representatives: **Thermal Products Ltd.** 1160 Blair Rd., Suite 118A Burlington Ontario L7M 1K9 (416) 335-0540 TELEX 061-8966 **Western Air Conditioning Ltd.** #15,1916-30th Ave. N.E. Calgary Alberta T2E 7B2 (403) 230-2101 TELEX 038-22738 **Thermequip Limited** 8019 Rue Alfred Ville D'Anjou Montreal P.Q. H1J 1J3 (514) 354-4811 TELEX 05-829636 **Thermal Products Ltd.** 6470 Viscount Rd. Mississauga Ontario L4V 1H3 (416) 678-7780 TELEX 06-983521 **Thermal Products Ltd.** 347 Sherbrooke St., Suite 301 North Bay Ontario P1B 2C1 (705) 476-5671 TELEX 067-76201 **Western Air Conditioning Ltd.** 10441 123rd St.

Suppliers

Edmonton Alberta T5N 1N8 (403) 488-7268 TELEX 037-2743

MCC Powers 6700 Finch Ave. W., Suite 600 Rexdale Ontario M9W 5P2 (416) 675-1810 Branches: 150 Skyway Ave. Rexdale Ontario M9W 4Y9 (416) 675-3944 428 Millen Road, Unit 26 Stoney Creek Ontario L8E 3N9 (416) 560-3837 2410 Holly Lane Ottawa Ontario K1V 7P1 (613) 733-9781 8231 de l'Industrie, Anjou Montreal Quebec H1J 1X8 (514) 352-9220 2745 Dutch Village Road Halifax N.S. B3L 4G7 (902) 453-4311 1522 St. James Street Winnipeg Manitoba R3H 0L2 (204) 774-3411 15140-128th Avenue Edmonton Alberta T5V 1A8 (403) 470-1214 37400-11A Street N.E. Calgary Alberta T2E 6M6 (403) 230-3161 8576 Fraser Street Vancouver B.C. V5X 3Y3

Measurex Inc. 981 Pierre Dupuy, Suite 136 Longueuil Quebec J4K 1A1 (514) 651-2410 Branch: Ste. 202-20216 Fraser Hwy. Langley B.C. V3A 4E6 (604) 534-1466

Mercoid Corporation 4201 Belmont Avenue Chicago IL 60641 (312) 736-2100 **Distributor: Davis Controls Limited** 4251 Dundas St., West—PO Box 160 Islington Ontario M9A 4X2 (416) 233-3211

Meriam Instrument 10920 Madison Avenue Cleveland Ohio 44145 (216) 281-1100 Representatives: **Peacock, Inc.** Box 1040, Station A Montreal Quebec H3C 2X5 **Peacock, Inc.** 2715 18th St. NE Calgary Alerta T2E 7E6 **Peacock, Inc.** 3905 101st St. Edmonton Alberta T6E 0A4 **Peacock, Inc.** 1180 Aerowood Dr. Mississauga Ontario L4W 1Y5 **Peacock, Inc.** 2325 Burrard St. Vancouver V6J 3J2

Marix Chemical Co. 2234 E. 75th St. Chicago Illinois 60649 (312) 221-8242

Mesam Limited 85 Glen Cameron Rd. Thornhill Ontario L3T 1N8 (416) 889-9540

Met-Pro Corporation 70 Arkay Drive Hauppauge NY 11788 (516) 435-0530 **Representative: Alloycraft** 51 Hillside Ave. Westmount Quebec H3Z 1V8 (514) 935-4653

Metex Corporation Ltd. 12 Penn Drive, Unit #1 Weston Ontario M9L 2A9 (416) 749-1210

Metritape, Inc. 33 Bradford St. Concord MA 01742 (617) 369-7500 Representatives: **Baker Instruments Ltd.** 118 Doncaster Avenue Thornhill Ontario L3T 1L3 (416) 889-8642 **K & A Equipment & Controls** Box 3430 Station B St. John NB E2M 4X9 (506) 672-1035 **Atlanta Heat & Transfer Co. Ltd.** P.O. Box 366 Bedford N.S. B4A 2A1 (902) 835-5090 **Canadian Dynamics Nova Ltd.** 217 East 16th Avenue Vancouver B.C. V5T 2T5 (604) 872-8106 **Canadian Dynamics Nova Ltd.** #3-227 14th St. N.W. Calgary Alberta T2N 1Z6 (403) 283-2813

Metropolitan Refining Co. Inc. 50-23 23rd Street Long Island City New York 11101 (212) 729-7200

Micronet Limited 1313 Hollis St. PO Box 7066 Halifax Nova Scotia B3K 5J4 (902) 429-3024 TELEX 019 22628

Midland Ross of Canada 1735 Kipling Ave. Weston Ontario M9R 2Y8 (416) 247-7456

Mikron Instrument Co. 445 W. Main St. Wyckoff NJ 07481 (201) 891-7330 **Representative: Tubefit Ltd.** 109 Eddystone Ave. Downsview Ontario M3N 1H5 (416) 743-1681

Milton Roy Industries Ltd. 300 Milroy Drive, P.O. Box 1055 Peterborough Ontario K9J 7A9 (705) 743-6550 Branch: 80 Galaxy Boulevard Rexdale Ontario M9W 4Y8 (416) 675-5656 Representatives: **A.G. Dunbar Company Limited** 2745 Dutch Village Road Halifax Nova Scotia B3L 4G7 (902) 455-5421 **Pesco Sales Limited** 3260 Rue Sartelon Montreal Quebec H4R 1E3 (514) 331-6953 **MacKay-Morton Limited** 50 Myrtle Street Winnipeg Manitoba R3E 2R2 (204) 786-5891 **Pembina Controls Limited** 14-401-45th Street West Saskatoon Saskatchewan S7L 5Z9 (306) 242-1993 **Zazula Process Equipment Limited** 1526-10th Avenue South West Calgary Alberta T3C 0J5 (403) 244-0751 **Extech Systems Limited** 180, 3025-12th Street North East Calgary Alberta T2E 7J2 (403) 276-8911 **Extech Systems Limited** 1638 West 6th Avenue Vancouver British Columbia V6J 1R3 (604) 734-4211 **C.G. Industrial Specialties Limited** 8130 Ontario Street Vancouver British Columbia V5X 3E3 (604) 321-3111

Miniveil Ltd. Box 357 340 Ward Street Port Hope L1A 3W4 (416) 885-4015

Mitco Corporation 440 Somerville Avenue Somerville Mass. 02143 (617) 623-7950

Mitsubishi Electric 3030 East Victoria St. Compton CA 90221 (213) 537-7132 Representatives: **Zero Energy Products** 2218 Ave. C. North Saskatoon Saskatchewan S7L 6C3 (306) 665-2022 **Team West Energy Products** 10105 97th Ave., Suite 101 Grand Prairie Alberta T8V 0N5 (403) 539-5340

Modicon Canada Ltd. 1515 Matheson Blvd. B2 Mississauga Ontario L4W 2P5 (416) 624-1484 Branches: 1515 Matheson Blvd. Unit B-10 Mississauga Ontario L4W 2P5 (416) 624-1484 TELEX 06-960285 8023 Argyll Road Edmonton Alberta T6C 4A9 (403) 468-6670 TELEX 037-42829 2045 West Broadway Vancouver B.C. V6J 1Z6 (604) 738-2525 15 Chelwood Street Winnipeg Manitoba R3C 4A3 (204) 339-1666 121 E Jessop Avenue Saskatoon Sask. S7N 1H3 (306) 955-2400 504 Victoria Avenue Windsor Ontario N9A 4M8 (519) 254-1383 178 Queen Street South Kitchener Ontario N2G 1W3 (519) 578-2280 1950 Champlain Avenue Whitby Ontario L1N 6A7 (416) 571-1084 3869 Sources Road Suite #200 Dollard Des Ormeaux Quebec H9B 2A2 (514) 683-0332 TELEX 05-8216815 298 Chantal Street Dieppe N.B. E1A 4X7 (506) 854-7910

Modine Manufacturing Co. 1500 Dekoven Ave. Racine WI. 53401 (414) 636-1200 **Representative: 1078 McDonald St. P.O. Box 1580** Regina Saskatchewan S4P 3C4 (306) 569-0654

Modudata Systems Ltd. 7 Guardsman Road Thornhill Ontario L3T 2A1 (416) 222-2902/889-9139

Modular Windows of Canada Limited 112A Snidercroft Road Concord Ontario L4K 1B8 (416) 669-2222

Moldcast 2070 Trans-Canada Hwy. Dorval Que. H9P 2N4 (514) 683-4210 **Agents: McDonald-Horsey Agencies Ltd.** 210-5720 MacLeod Trail South Calgary Alberta T2H 0J8 **McDonald-Horsey Agencies Ltd.** 9738-51st Ave., Suite 202 Edmonton Alberta T6E 0A6 **Design Lighting Inc.** 101-7080 River Rd. Richmond B.C. V6X 1X5 **Loumond Sales Ltd.** 404-115 Bannatyne Ave. Winnipeg Manitoba R3B 0R3 **Kilbride Electrical Agency Inc.** 7001 Mumford Rd. Tower 2, Suite 3030 Halifax Nova Scotia B3L 4R3 **Vigilant Technical Sales Ltd.** P.O. Box 4483 (68 Mullock St.) St. John's Nfld. A1C 6C8 **N. Rutenberg Sales Ltd.** 215 Carlingview Dr., Unit 309 Rexdale Ont. M9W 5X8 **W.S. Sales Associates Ltd.** 29 Bayswater Ave. Ottawa Ont. K1Y 2E5 **W.S.B. Sales Associates Ltd.** 131 Sherryl Cr. North Bay Ontario P1B 8R8 **Les Ventes P.T. Sales Inc.** 426 Victoria St. St. Lambert Que. J4P 2H9 **Luxtec Ltee.** 3885 boul. Hamel Québec Qué. G2E 3M3 **Isted Technical Sales Ltd.** Suite C, 123 Pinehouse Drive Saskatoon Sask. S7K 5W1 **Isted Technical Sales Ltd.** 7 Jupp Place Regina Sask. S4S 6R1

Moldow Dust Control Sys. Ltd. 5266 General Road, Unit 4 Mississauga Ontario L4W 1Z7 (416) 624-6242

Moore Industries Inc. 16650 Schoenborn St. Sepulveda CA 91343 (213) 894-7111 Representatives: **ARMATEK Controls Ltd.** 27 Fima Crescent Toronto Ontario M8W 3R1 (416) 251-3111 TELEX 0695-7689 **CB Engineering Ltd.** No. 1-6320 11th Street S.E. Calgary Alberta T2H 2L7 (403) 259-6220 TELEX 03-824812 **Advanced Control System Ltd.** 117-1625 Dublin Ave. Winnipeg Manitoba R3H 0W3 (204) 774-9444 TELEX 07-587555

Morval-Durofoam Limited 152 Birch Ave. P.O. Box 878 Kitchener Ont. N2G 4E1 (519) 579-6100 TORONTO (416) 823-7450 (416) & (705) 1-800-265-8935

Motorola Ltd. 3125 Steeles Ave. E. Willowdale Ont. M2H 2H6 (416) 499-1441

Mottpac Boilers Inc. 1028 Royal York Road Toronto Ont. M8X 2G4 (416) 231-8516

MTE 5385 Pare St. Montreal PQ H4P 1P9 (514) 342-1810 Branches: 7585 Torbram Rd. Mississauga Ont. L4T 1H2 (416) 678-0567 1020 Powell Ave. Winnipeg Man. R3H 0H6 (204) 633-9135 4244-99th St. Edmonton Alta. T6E 5B3 (403) 462-4272 3353 Wayburne Dr. Burnaby BC V5G 4L4 (604) 294-1154

Muirhead Engineering Ltd. 4750 Shappard Ave E. Agincourt Ontario M1S 3V7 (416) 293-3666

Multi-Amp Corp. 4271 Bronze Way Dallas TX 75237 (214) 333-3201 Representatives: **Foulis Engineering Sales Ltd.** P.O. Box 1086 Fredericton NB E3B 5C2 (506) 455-6012 **Foulis Engineering Sales Ltd.** P.O. Box 1530 Halifax NS B3J 2Y5 (902) 429-1530 **Foulis Engineering Sales Ltd.** P.O. Box 2490 St. John's NF A1C 6E8 (709) 368-6007 **Fraser, George M. Ltd.** 590 Ave. Meloche Dorval PQ H9P 2P4 (514) 636-9139 **Fraser, George M. Ltd.** 18-11 Progress Ave. Scarborough ON (416) 298-0008 **Progressive Agencies Ltd.** P.O. Box 405 Regina SK S4P 3A2 (306) 569-0411 **McCuaig, D.A. Agency Ltd.** 471 Warsaw Ave. Winnipeg MB R3M 3S7 (204) 284-3834 **Canadian Dynamics Nova Ltd.** P.O. Box 23526 Vancouver BC V7B 1W2 (604) 872-8106 **Canadian Dynamics Nova Ltd.** #3-227 14th St. N.W. Calgary AB T2N 1Z6 (403) 283-2813

Multitrol Corp. Unit 19, 10 Planchet Road Maple Ontario L0J 1E0 (416) 669-5505

Multiver Ltée 436 Rue Bérubé Ville Vanier Québec G1M 1C8 (418) 687-0770

Myers Can. Ltd. P.E. Box 39, 269 Trillium Dr. Kitchener Ontario N2G 3W9 (519) 893-7565

Suppliers

N

N.A.P. Ltd. 9663-199 A Street Langley B.C. V3A 4P8 (604) 888-1421 Branch: 1040 Railway Ave. Kelowna B.C. V1Y 7V8 (604) 762-5343

Napier-Reid Ltd. 10 Alden Rd., Unit 2 Markham Ontario L3R 2S1 (416) 475-1545

National Cellulose Corporation P.O. Box 45006 12315 Robin Blvd. Houston TX 77245-5006 (713) 433-6701 Branch: 13385 Comber Way Surrey B.C. V3W 5V8 (604) 591-5577 **Representative: I.F. Industries** 1426 Wallace Road Oakville Ontario L6L 2Y2 (416) 827-6358

National Electric 4 Newbold Ave. Toronto Ontario M4L 2G7 (416) 964-8488

National Sonics Div of Xertex 250 Markus Blvd. Hauppauge NY 11787 (516) 273-6600 Representatives: **Brian Engineering Ltd.** 3-20 Steekle Place Kitchener Ontario N2E 2C3 (519) 893-7474 **880 Philip Street** Sarnia Ontario N7T 1Z6 (519) 337-7591 **736 Harold Crescent** Thunder Bay Ontario P7C 5H8 (807) 623-2155 **2445 Duncan Road** Montreal 9 P.Q. **25 Shaft Road** Rexdale Ontario (416) 248-0226 **P.O. Box 1131** 17 Bedford Trade Mart Bedford, Halifax N.S. B0N 1B0 (902) 835-8322 **99 Rocky Lake Drive** Unit 17 Bedford Nova Scotia B4A 2T3 **1746 St. James Street** Winnipeg Manitoba R3H 013 (204) 632-5516 **9259-48th Street** Edmonton Alberta T6B 2R9 (403) 468-2123 **101-1135 64th Avenue, S.E.** Calgary Alberta T2H 2J7 (403) 255-4457 **1475 Boundary Road** Vancouver B.C. V5K 4V2 (604) 291-2341 **BCA Industrial Controls, Ltd.** 9688 187th Street Surrey B.C. V3T 4X5 (604) 888-4141 **#13 6116-4th Street, S.E.** Calgary Alberta T2H 2H9 (403) 253-1949

Nationwide Boiler Inc. 42400 Christy Street Fremont California 94538 (415) 490-7100

Neeco Industries 3077 Mainway Burlington Ontario L7R 4C5 (416) 827-8000

Neptune Meters 3526 Lakeshore Blvd. West Toronto Ontario M8W 1N7 (416) 259-4211 Branches: 54 Wright Ave. Burnside, Dartmouth Nova Scotia B3B 1H3 (902) 463-6420 12455 Rue April Pointe aux Trembles Quebec H1B 5L8 (514) 645-7404 1500 Church Avenue Winnipeg Manitoba R2X 1G6 (204) 633-7088 3610 Manchester Road Calgary Alberta T2G 3Z5 (403) 243-2434 4085-2nd Avenue Burnaby British Columbia V5C 3X1 (604) 299-6222

Newport Electronics 630 E. Young St. Santa Ana CA 92705 (714) 540-4914 Representatives: **Webster Instruments** 1134 Aerowood Drive Mississauga Ontario L4W 1Y5 (416) 625-0600 880 Lady Ellen Place, Suite 3 Ottawa Ontario K1Z 5L9 (613) 725-0288 760 Laurentian Blvd., Suite 115 St. Laurent P.Q. H4M 2M4 (514) 744-5829 #208 Campbell Center 200 Carnegie Drive St. Albert Alberta T8N 3K1 (403) 458-4669 4211 Kingsway, Suite 509 Burnaby British Columbia V5H 3Y6

Niagara Blower 405 Lexington Ave. New York NY 10174 (212) 697-6151

Nixon Plate Coils Vandorf Rd. East Gormley Ontario L0H 1G0 (416) 923-3746

North American Mfg. Co. 2005 Sheridan Dr. Buffalo NY 14223 (716) 874-1248

Northfab Systems (Canada) Ltd. 655 Industrial Rd., Unit 8 P.O. Box 2145 Cambridge Ontario N3C 1W4 (519) 653-7869

NovaVent North America 3550 Wolfedale Rd. Mississauga Ontario L5C 2V6 (416) 273-4640

Nu-Tech Glass Industries Reixinger Rd. P.O. Box 775 Niagara Falls Ontario L2E 6V6 (416) 295-4321

Nu-Tech Mktg. Systems 6295 Shawson Dr., Unit 2B Mississauga Ontario L5T 1H3 (416) 671-4121

Numatics 1450 N. Milford Rd. Highland MI 48031 (313) 887-4111 Branch: Numatics Air Controls 363 Sovereign Rd. London Ontario N6M 1A3 (519) 452-1777

O

Ogontz Controls Company 141 Tarwood Road P.O. Box 479 Willowgrove PA., U.S.A. 19090 (215) 657-4770 **Representative: Pesco Sales Ltd.** 3260 Vartelon Montreal Quebec H4R 1E3 (514) 331-6953

Ohio Semitronics 1205 Chesapeake Ave. Columbus Ohio 43212 (614) 486-9561 Representatives: **CTH Instruments Ltd.** 156 Dennis Ave. St. Lambert Quebec J4P 2G2 **CTH Instruments (West) Ltd.** 8909-20 Street Edmonton Alberta T6P 1K8 (403) 467-1809 **Armatek Controls** 27 Firma Crescent Toronto Ontario M8W 3R1

OHM-Rite Electrical 181 Carlaw Avenue Toronto Ontario M4M 2S1 (416) 469-5555

Olivine Corp. 1015 Hilton Bellingham Wash., U.S.A. 98225 (206) 733-3332

Olman Instruments 445 Finchdene Sq. Scarborough Ontario M1X 1B7 (416) 298-6770 Branch: 5780 Avenue Decelles, Suite 303 Montreal Quebec H3S 2C7 (514) 342-9433

Onter 12 Leswyn Road Toronto Ontario M6A 1K3 (416) 781-5286 Branches: 3300 Cavendish Boulevard, Suite 120 Montreal P.Q. H4B 2M8 (514) 489-8263 TELEX 055-66426 301-14th Street N.W., Suite 480 Calgary Alberta T2N 2A1 (403) 283-5909 TELEX 038-21609 5630-88th Street Edmonton Alberta T6E 5R8 (403) 468-1580 TELEX 037-3813 11576 Bridgeport Road Richmond B.C. V6X 1T5 (604) 273-2982 TELEX 043-55770 345 N. Christina Street Sarnia Ontario N7V 1Z3 (519) 344-7444

Opcon 729-80th St. S.W. Everett Washington 98203 (206) 353-0900 Representatives: **Eltron Enterprises, Limited** 7583 Vantage Place Delta B.C. V4G 1A5 (604) 946-1271 **N. Rutenberg Sales** R.R. 8, Edgemount Road Watford Ontario N0M 2S0 (519) 873-4132 **N. Rutenberg Sales Ltd.** Box 21, Site 4, 33 Mikkola Coppercliff Ontario P0M 1N0 (705) 692-5146 **N. Rutenberg Sales Ltd.** P.O. Box 1036 North Bay Ontario P1B 8K3 (705) 476-3387 **N. Rutenberg Sales Ltd.** 215 Carling View Dr., #309 Rexdale Ontario M9W 5X8 (416) 675-1298 TELEX 06-989277 **Ultra Precision Equip. Ltd.** 3285 Cavendish, 385 Montreal Quebec H4B 2L9 (514) 482-6715

Ordan Thermal Products 210 Don Park Rd. #15 Markham Ont. L3R 2V2 (416) 475-9292

P

P.H. Tech. Inc. C.P. 220 Levis Quebec G6V 6N8 (418) 833-3231 **Representative: Celtech Inc.** Concord Ontario

P.S.C. Controls 1980 Monterey Laval Québec H7L 3S3 (514) 687-2710

Pacer Industries 1450 First Ave. Chippewa Falls WI., U.S.A. 54729 (715) 723-1141 **Representative: Duncan Instruments, Ltd.** 122 Millwick Dr., Unit #3 Weston Ontario M9L 1Y6 (416) 742-4448

Pacific Technology 11825-120th Ave. N.E. P.O. Box 2249 Kirkland WA 98033 (206) 823-7100 **Distributor: A-C Systems, Inc.** 3186 Duval Road N. Vancouver B.C. V7J 3E4 (604) 980-6612

Paco Pumps 845-92nd Avenue Oakland CA 94604 (415) 562-5628 Branch: Paco Pumps of Canada 35 Sinclair Avenue Georgetown Ontario L7G 1J3 (416) 877-5272

Palmer Instruments 3130 Wasson Road P.O. Box 9179 Cinti. Ohio 45209 (513) 871-7800 Branch: Palmer Thermometer 2220 Midland Ave., Unit 3 Scarborough Ontario M1P 3E6 (416) 291-9237

Panelbloc Corp. 10740 Broadway Cleveland Ohio 44125 (216) 441-5600 Representatives: **G. Mitchell & Co. Ltd.** 7155 Waverley Street Montreal PQ H2S 3J1 (514) 273-1501 **Andco Const. Sup. Ltd.** 815 Francis Ave. Kelowna BC V1Y 5G6 (604) 762-5662 **Indusco Sales Ltd.** 48 Chauncey Ave. Toronto ON M8Z 2Z4 (416) 231-9377 **H.F. Clarke Ltd.** 5220 1A Street Calgary AB T2H 1J1 **H.F. Clarke Ltd.** 18112 107 Ave. Edmonton AB T5S 1K5 (403) 483-3137 **H.F. Clarke Ltd.** 1426 Erin Street Winnipeg MB R3E 2S8 (204) 772-2584 **H.F. Clarke Ltd.** 1741 Broder Street Regina SK S4N 5P1 (306) 352-3131

Parametrics 284 Racebrook Rd. Orange CT 06477 (203) 795-0811 Distributors: **Ainsworth Electric Ltd.** 131 Bermondsey Road Toronto Ontario M4A 1X4 (416) 751-4420 **Arrow Speed Controls, Ltd.** 54 East Third Avenue Vancouver British Columbia V5T 1C5 (604) 879-6381 **Bearing Supply Ltd.** 472 Notre Dame Avenue Winnipeg Manitoba R3B 1S9 (204) 947-0101 **Beel Controls Ltd.** 2650 Pitfield Blvd. St. Laurent Quebec H4S 1G9 (514) 334-6500 **Sico Drives** C6-6215 Third Street, S.E. Calgary Alberta T2H 2L2 (403) 253-8738

Paramount Glass & Millwork 105 Panet Rd. Winnipeg Man. R2J 0S1 (204) 233-4966

Parrsboro Metal Fabricators Crossroads Parrsboro N.S. B0M 1S0 (902) 254-2543

Pass & Seymour Canada 130 Martin Ross Ave. Downsview Ontario M3J 2L4 (416) 663-6277 **Agents: Darmac Agencies Limited** 7990 Graham Avenue Burnaby British Columbia V3N 1V9 (604) 524-8836 **Roche Engineering Sales Limited** 202 - 349 14th Avenue S.W. Calgary Alberta (403) 237-7396 TELEX 03-825674 **Roche Engineering Sales Limited** 11731 - 105 Avenue Edmonton Alberta T5H 0L9 (403) 452-4196 TELEX 037-3471 **Douglas A. Ligertwood Limited** 230 Avenue "Y" North Saskatoon Saskatchewan S7L 3K7 (306) 384-0422 TELEX 074-2884 **Douglas A. Ligertwood Limited** 103 Kingston Row Winnipeg Manitoba R2M 0S7 (204) 233-6873 TELEX 07-55648 **Empro Sales Company** 6250 Ferrier St., Suite 803 Montreal Quebec H4P 1L3 (514) 341-6420 TELEX 05-24682

Suppliers

Emmersales Limited 55 Chandler Crescent Moncton New Brunswick E1E 3W6 (506) 855-1010 TELEX 014-2875 **K.a Wight & Associates Ltd.** Manufacturers' Representatives P.O. Box 8212 St. John's Newfoundland A1B 3N4

Paterson Aire Systems 3285 Mainway Dr. Burlington Ontario L7M 1A6 Toronto (416) 925-1963 Burl. (416) 335-0239 Distributors: **R.L. Fulton Equipment Ltd.** P.O. Box 1402 N 5654 Russell St. Halifax Nova Scotia B3K 5H7 (902) 453-2650 **Powrmatic du Canada Ltee.** 7400, 19th Avenue Montreal Quebec H2A 2L7 (514) 376-6293 **Powrmatic du Canada Ltee.** 365 Rue Fortin Ville De Vanier Quebec G1M 1B2 (418) 683-2708 **Heat Recovery Management Ltd.** 1745 Courtwood Crescent Ottawa Ontario K2C 3J2 (613) 225-0148 **Envirothermics** St. James P.O. Box 40 1887 Portage Ave. Winnipeg Manitoba R3J 0H3 (204) 888-2390 **N-Viro Air Supply Co. Ltd.** 847 Viewfield Road Victoria British Columbia V9A 4V2 (604) 383-6774

Patterson-Kelley P.O. Box 458 East Stroudsburg PA., U.S.A. 18301 (717) 421-7500 Representatives: **MacDonald Process Equip., Ltd.** 133 The West Mall, Unit #2 Etobicoke Ontario M9C 1C2 (416) 626-7300 **Makinson-Winchester Ltd.** 5100 St. Francois Rd. St. Laurent Montreal H4S 1J8 (514) 334-1050 **Makinson-Winchester Ltd.** 3640 Weston Rd., Unit 11 Weston Ontario M9L 1WZ (416) 749-8244

Paul Mueller P.O. Box 828 Springfield MO 65801 (417) 831-3000 **Agents: Neptune Dynamics, Ltd.** 600-890 W. Pender Vancouver B.C. V6C 1K4 (604) 687-0887 **John Roberts & Son Inc.** 45 Pacific Court, Unit #7 London Ontario N5V 3N4 (519) 453-1980

PCB Piezotronics 3425 Walden Avenue Depew New York 14043-2495 (716) 684-0001 Representatives: **Intertechnology Ltd.** P.O. Box 219 Don Mills Ontario M3C 2S4 (416) 445-5500 **Intertechnology Ltd.** 3869 Blvd. de Sources 207 Dollard des Ormeaux Montreal H9B 2A2 (514) 861-1325 **Intertechnology, Ltd.** Bow Valley, Square 2 Calgary Alberta T2P 2W7 (403) 265-8552 **Intertechnology, Ltd.** 180-10751 Shell Bridge Way Richmond BC V6X 2W8 (604) 270-9538 **Intertechnology, Ltd.** 856 Connaught Ave. Ottawa Ontario K2B 5M6 (613) 820-5669

Peabody Engineering 1225 Matheson Blvd. Mississauga Ontario L4W 1Y9 (416) 625-1550

Peabody Gordon Platt Box 202 Rexdale Ontario M9W 5L1 (416) 743-4401

Peel Energy Management 549 Hyacinthe Blvd. Mississauga Ontario L5A 3R4 (416) 273-4909

Peerless Electric 5585 Fullum St. Montreal Que. H2G 2H5 (514) 526-1671 **Representative: Lite-Tech Industries Ltd.** 161 Bartley Drive Toronto Ont. M4A 1E6 (416) 751-5644

Peerless Pump 1200 Sycamore Street Montebello CA 90640 (213) 726-1232 Branch: 439 Lynnover Way S.E. Calgary Alberta T2C 1L2 (403) 279-1954 Distributors: **Mandem** 3611-60 Avenue S.E. Calgary Alberta T2H 1L7 (403) 279-1050 **Mandem** 17704-103 Avenue Suite 104 Edmonton Alberta T5W 1J9 (403) 483-3912 **Westcan Irrigation Ltd.** 510-36th Street N. Lethbridge Alberta (403) 328-1709 **Christianson, Ltd.** Portage La Prairie Manitoba R1N 3B2 (204) 857-3451 **Mandem** 21 Murrary Park Road Winnipeg Manitoba R3G 3S2 (204) 885-4440 **Mandem** 481 Edinburgh Drive Moncton New Brunswick E1C 8N6 (506) 854-0982 **Napier-Reid, Ltd.** 10 Alden Road, Unit 2 Markham Ontario L3R 2S1 (416) 495-1545 **Flometrico, Ltd.** 1081 Meyerside Drive Unit 11 Mississauga Ontario L5A 3A1 (416) 677-8413 **Flometrico, Ltd.** Box 2178, Station P Thunder Bay Ontario P7B 5E8 (807) 577-8812 **Mandem** 8550 Delmeade Road Mount Royal Montreal Quebec H4T 1L7 (514) 342-9233 **Mandem** 1250 St. John Street Regina Saskatchewan S4R 1R9 (306) 352-2631 **Mandem** 1729 Ontario Avenue Saskatoon Saskatchewan S7K 1S9 (306) 244-1505 **Chamco Engineering Sales Ltd.** 2 East First Avenue Vancouver British Columbia V5T 1A1 (604) 879-8841 **Mandem** 114 Calcite Road White Horse Yukon Y1A 4S2

Pendall Boiler 50 Bartlett Ave. Toronto M6H 3E6 (416) 536-2191

Penn Ventilator Can. Box 28 Farnham Quebec J2N 2R4 (514) 293-5317

Perolin-Bird Archer 110 Second St. Cobourg Ontario K9A 4M2 (416) 372-3344 Branch: Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Quebec, Regina, Saskatoon, Toronto **Agent: Maritimes**

Peschel Instruments Inc. 1411 SE 10th St. Cape Coral FL 33904 (813) 574-3164 Representatives: **Duncan Instruments Ltd.** 122 Millwick Drive Weston Ontario M9L 1Y6 (416) 742-4448 **Commonwealth Engineering & Sales** C.P./PO Box 531 St. Laurent Montreal Que. H4L 4V7 (514) 744-1004

Petro-Sun 2915 blvd Pitfield V. St-Laurent Que. H4S 1L6 (514) 337-2264

Phelan Bros. 55 Healey Rd. Bolton Ont. L0P 1A0 (416) 857-2700

Philips Electronics 601 Milner Avenue Scarborough Ontario M1B 1M8 (416) 292-5161 Branches: 1001 Ellesmere Road Scarborough Ontario M1P 2W7 (416) 292-8200 5930 Cote de Liesse Road Montreal P.Q. H4T 1E1 (514) 342-9180 130 Albert Street, Suite 1005 Ottawa Ontario K1P 5G4 (613) 237-3134 10 Morris Drive Dartmouth Nova Scotia B3B 1K8 (902) 463-7221 401 Weston Street East Winnipeg Manitoba R3E 3H4 (204) 774-1931 4620 Manilla Road S.E. Calgary Alberta T2G 4B7 (403) 243-2710 12872-141st Street Edmonton Alberta T5L 4S3 (403) 452-7940 3605 Grandview Highway Vancouver B.C. V5G 2G8 (604) 435-4411

Phoenix Products Co. 4715 N. 27th St. Milwaukee Wis. 53209 (414) 445-4100 Representatives: **Images Unlimited** 7171 Torbram Rd., Unit #5 Mississauga Ont. L4T 3W4 (416) 677-8645 **Coast Dieselec, Ltd.** 1920 Main St. Vancouver B.C. (604) 872-5201 **Pierre Lemme Engineering** 423 Ste. Hubert Ste. Jean Quebec J3B 1P9 (514) 331-5575

Photomation PO Box 460 Mountain View CA 94043 (415) 967-8992

Pittsburgh Corning 301-5075 Yonge St. Willowdale Ont. M2N 6C6 (416) 222-8084 Branches: Montreal (514) 866-9100 Vancouver/Calgary (604) 936-0030/(403) 236-1873

Plantguard Systems PO Box 1504 St. Catharines Ontario L2R 7J9 (416) 685-9444

Plasti-Fab Ltd. 625, 28 St. N.E. Calgary Alberta T2A 4L6 (403) 273-0996 Branches: 679 Alford Ave. New Westminster B.C. V3B 5B5 (604) 526-7861 16625-114 Ave. Edmonton Alberta T5M 3P9 (403) 453-3718 837-57 St. East Saskatoon Sask. S7K 5Z2 (306) 244-3545 976 Dugald Ave. Unit 3 Winnipeg Manitoba R2J 0G9 (204) 237-7711

Plibrico (Canada) P.O. Box 910 Burlington Ontario L7R 3Y7 (416) 639-8660 Branches: 1465 Graham Bell St. Boucherville Quebec J4B 6A1 (514) 641-1730 865 King Edward St. Winnipeg Manitoba R3H 0P8 (204) 772-2406 11604-163 St. Edmonton Alberta T5M 3T3 (403) 451-0681 Unit No: 10 6204-29th St. S.E. Calgary Alberta T2C 1W3 (403) 236-0191 1170 Glen Dr. Vancouver B.C. V6A 3M6 (604) 253-5528 100 Albert St. Ext., Moncton New Brunswick E1C 8M9 (506) 855-7877

PMC/Beta Corporation 4 Tech Circle Natick Massachusetts 01760 (617) 237-6920 **Representative: Automation Industries, Ltd.** 6860 Raxwood Rd. Mississauga Ontario L4V 1L8 (416) 678-9590

Pollard & Son, N. P.O. Box 507 Burlington Ontario L7R 3Y3 (416) 634-2365 Branch: 4380-76th Ave. S.E. Calgary Alberta T2C 2J2 (403) 236-0195

Porritts & Spencer Filtration 240 Lottridge St. Hamilton Ont. L8L 6V9 (416) 547-5730 TELEX 061-8828 TORLINE 842-1037 Branches: 2520 Palliser Dr. S.W. Calgary AL T2V 4S9 (403) 281-5295 TELEX 03-82568 7493 Trans Canada Hwy. St. Laurent P.Q. H4T 1T3 (514) 331-4627 TELEX 05-826794

Potter & Brunfield 52 Royal Rd. Guelph Ont. W1H 7H1 (519) 822-1576

Power Vac Services 4544 Sheppard Ave. East Scarborough Ont. M1S 1V2 (416) 292-7718

Power/Mate Corp. 514 South River Street Hackensack NJ 07601 (201) 440-3100 **Representative: Radionics Limited** 1240 Ellesmere Road Scarborough Ontario M1P 2X4 (416) 292-1575

Powsave Systems 615 Sheppard Ave. E. Willowdale Ont. M2K 1B5 (416) 221-9778

PPG Industries Canada 50 St. Clair Ave. West Toronto Ontario M4V 1M9 (416) 923-5441 Branches: 255 Boul. Decarie St-Laurent Quebec H4N 2L8 (514) 748-8718 4416-72nd Ave. S.E. Calgary Alta. T2C 2C1 (403) 279-8831

Precision Multiple Controls 3289 Lenworth Drive, Unit E Mississauga Ont. L4X 2H1 (416) 625-6225

Prelco Electronics Ltd. 2767 Thamesgate Dr. Mississauga Ont. L4T 1G5 (416) 678-0401

Preso Industries 3035 Sartelon St. Laurent Que. H4R 1E6 (514) 334-0903

Presto Tek 7321 N. Figueroa St. L.A. Calif. 90041 (213) 257-7585

Pro Controls Box 952 Niagara Falls Ontario L2E 6V8 (416) 295-3222

Prochem R.R. No 2, 35-190 Hwy. 7 W. Brampton Ontario L6V 1A1 (416) 459-4319

Prodel 370 Ave. Des Laurentides Beauport P.Q. G1C 4N3 (418) 663-3112

Proence Systems #14, 190 Hwy #7 West Brampton Ontario L7A 1A2 (416) 451-3232

Progressive Equipment 413 E. Ninth St. Erie PA 16503 (814) 452-4363

Prolight 87 Penn Drive Weston Ontario M9L 2A6 (416) 745-7084

Suppliers

Promac Controls Inc. 1375 Morningside Avenue Scarborough Ontario M1B 3C5 (416) 284-8440

PSG Industries 1225 Tunnel Rd. Perkasie PA 18944 (215) 257-3621 **Agent: Dyna Tech Systems** 6390 Aubrey St. N. Burnaby BC V5C 5P2 (604) 294-1191

Pumps & Softeners 680 Waterloo Street London Ontario N6A 4N8 (519) 672-0330

Pyle-National of Canada 2560 South Sheridan Way Mississauga Ont. L5J 2M9 (416) 822-3710

R

RAB Dedesco 106 Schneider Rd Kanata Ont. K2K 1Y2 (613) 592-3026

Rada Mechanical Products PO Box 148 Markham Ontario L3P 3J5 (416) 297-2173 TELEX 06-986888

Radiant Tube Systems 71 Brydon Drive Rexdale Ont. M9W 4N3 (416) 746-5511

Ral Products 1146 Westport Cr. Unit 6 Mississauga Ontario L5T 1G1 (416) 671-3787 TELEX 06-968946

Ramsey Controls 333 Route 17 Mahwah NJ 07430 (201) 529-4400 Distributors: **Eltron Enterprises, Ltd.** 7583 Vantage Place Delta B.C. V4G 1A5 (604) 946-1271 **L.S. Tarshis & Sons, Ltd.** 815 McCaffrey St. Laurent Montreal H4T 1N3 (514) 731-3411 **L.S. Tarshis & Sons, Ltd.** 50 Galaxy Blvd. Unit 5 Rexdale Ontario M9W 4Y5 (416) 675-3100 **Saftronics Systems, Ltd.** 149 Denison St. Markham ON L3R 1B5 (416) 492-8194

Rantach Electronics 230 Canarctic Dr. Downsview Ont. M3J 2P4 (416) 661-9319

Raskin, F. G. Montreal PQ H1P 1J8 (514) 323-5920

Ray Burner 1301 San José Ave. San Francisco CA 94112 (415) 333-5800

Raypak Thermonics (Canada) 120-124 Skyway Avenue Rexdale Ontario M9W 4Y9 (416) 675-7262

RCC Electronics 243 College St. Toronto Ontario M5T 2Y1 (416) 598-4004

RCR 2295 Metropole Longueuil P.Q. J4G 1E5 (514) 670-8100

Reliance Electric 296 Walker Drive Bramalea Ont. L6T 4B3 (416) 792-1739

Reliance Electric Ltd. Dodge Div. 5220 Greenbank Rd. Mississauga Ontario (416) 625-8112 **Distributor: Ainsworth Electric Ltd.** 131 Bermondsey Rd. Toronto Ontario M4A 1X4 (416) 751-4420

Repla 482 South Service Rd. E. Oakville Ont. L6J 2X6 (416) 844-1271

Republic Powdered Metals 12 Finlay Road Bramalea Ontario L6T 1A9 (416) 457-6209

Research Appliance Co. P.O. Box 265 Cambridge MD 21613 (301) 228-9505 Representatives: **Hoskin Scientific Ltd.** 1156 Speers Road Oakville Ontario L6L 2X4 (416) 842-0237 **Hoskin Scientific (Western)** 239 East Sixth Avenue Vancouver B.C. V5T 1J7 (604) 872-7894 **Hoskin Scientific (Eastern)** Suite 1205-Maritime Center 1505 Barrington St. Halifax N.S. B3J 3K5 (506) 425-8683 **Les Instruments - Hoskin** 5683 Pare Montreal Quebec H4P 1S1 (514) 738-9421

Resource Interface Suite 200 2 Sheppard Avenue East Willowdale Ontario M2N 5Y7 (416) 226-6568

Resources Conservation Co. P.O. Box 3766 Seattle Washington 98124 (206) 828-2400

Reuter-Stokes Canada 465 Dobbie Dr. Cambridge Ontario H1R 5X9 (519) 623-4880

Rexanne Products P.O. Box 39702 or 2439 Riverside Dr. Los Angeles CA 90039 (213) 663-3261

Reynolds Extrusion 500 Edward Ave. Richmond Hill Ontario L4C 4Y9 (416) 884-9161

RFL International Powerville Road Boonton New Jersey 07005 (201) 334-3100 Representatives: **Duncan Instruments Ltd.** 122 Millwick Drive, Unit 3 Weston Ontario M9L 1Y6 (416) 742-4448 **Jerome & Francis Co.** 1015 Prospect Avenue No. Vancouver B.C. V7R 2M5 (604) 986-1286

Rheem Canada 128 Barton St. W. Box 846 Hamilton Ontario L8N 3P3 (416) 527-9194

Richard W. Watt & Associates P.O. Box 660 Oconomowoc WI 53066 (414) 646-4296

Riddaire Corporation 1210 Sheppard Ave. East Willowdale Ont. (416) 497-1306

Riley-Beaird P.O. Box 31115 Shreveport LA 71130-1115 (318) 865-6351 Representatives: **Mechron Engineering Products Ltd.** 207 Place Frontenac Pointe Claire, Montreal Quebec H9R 4Z7 (514) 695-1485 **Petro Equipment Sales, Ltd.** P.O. Box 5843 Sta. "A" Calgary Alberta T2H 1Y3 (403) 243-4773

Riverwood Enterprises & Mfg. 985 Westport Crescent Mississauga Ontario L5T 1E8 (416) 687-6720

Robert Bell Ind. Ltd. P.O. Box 70 Seaforth Ontario N0K 1W0 (519) 527-0600 TELEX 069-55305

Robert H. Wager Passaic Ave. Chatham New Jersey 07924 (201) 635-9200 Representatives: **Nortech Control Equipment Inc.** 135-4 The West Mall Etobicoke Ontario M9C 1C2 (416) 622-7820 **B&D Engineering Sales** 2402 Shell Road Richmond B.C. V6X 2P1 (604) 273-9481

Robert Hunt Corp. 1040 Wilton Grove Road London Ontario N6A 4C2 (519) 686-3100 Branches: R.R. #4, Hwy. #135 London Ontario (519) 681-2660 250 Bowes Road Concord Ontario (416) 669-1104 195 Colonnade Road Nepean Ontario (613) 226-1881 352 Sauteaux Cres. Winnipeg Manitoba (204) 885-9220 4116-72nd Avenue S.E. Calgary Alberta (403) 279-2473 9044-18th Street Edmonton Alberta (403) 464-5331 59 Wright Avenue Dartmouth Nova Scotia (902) 469-6550 2060 Thimens Blve. St. Laurent Quebec (514) 332-2585 2083 Branly Ste. Foy Quebec (418) 683-1762 9 Riverview Drive Mount Pearl Newfoundland (709) 368-8354 877 Wilson Avenue Kitchener Ontario (519) 893-7922 10280 Tecumseh Road East Windsor Ontario (519) 736-2100 2335 Maley Drive Sudbury Ontario (705) 566-0222 639 Park Street Regina Saskatchewan (306) 949-1666 501-45th Street Saskatoon Saskatchewan (306) 244-2800 #104-3850 Jacombs Road Richmond British Columbia (604) 270-8777

Robert Mitchell 350 Decarie Blvd. St. Laurent Que. H4L 4W5 (514) 747-2471

Robert Soper P.O. Box 277 Hamilton Ontario L8N 3E8 (416) 528-7936 Branches: Soper Tent & Awning Ltd. Box 1730 Mississauga Ontario L4Y 3W6 (416) 274-8501 213 D'Avingnon Road Dollard Des Ormeaux Quebec H9B 1Y4 (514) 683-5498 P.O. Box 29 Morinville Alberta T0G 1P0 (403) 939-4182

Robertshaw Controls Canada Mississauga Ontario L4Y 3Z2 (416) 233-5831

Rochester Instrument Systems 915 Kipling Ave. Toronto Ontario M8Z 5H4 (416) 233-6218 Representatives: **Quontime Inc.** Box 201, Snowdon P.O. Montreal Que. H3X 3T4 (514) 937-3914 TELEX 055-66268 **Quontime Inc.** Box 952 Armdale P.O. Halifax Nova Scotia B3L 4K9 (902) 477-9750 **Controls Equipment Ltd.** 317 Adelaide St. S. London Ont. N5Z 3L3 (519) 681-9390 TELEX 064-7217 **Controls Equipment Ltd.** 2410 Tedlo Street Mississauga Ont. L5A 3V3 (416) 276-1671 TELEX 06-961398 **D.A. Mc Cuaig Agency Ltd.** 471 Warsaw Ave. P.O. Box 188 Winnipeg Man. R3L 0R2 (204) 284-3834 TELEX 07-587521 **Simark Controls Ltd.** 7725-46th St. S.E. P.O. Box 5514, Stn. "A" Calgary Alberta T2H 1X9 (403) 236-0580 TELEX 07-587521 **Simark Controls Ltd.** 4748-99th Street Edmonton Alberta T6E 5H5 (403) 436-8850 TELEX 037-2220 **Black & Baird Ltd.** 1362 Venables St. Vancouver B.C. V5L 2G4 (604) 251-2232 TELEX 04-51216

Rock Master 1022 Santerre Drive Grand Prairie Texas 75050 (214) 647-2885 Representatives: **Eastside Industrial Products, Ltd.** Bay #2, 2280-39th Ave. N.E. Calgary Alberta T2E 6P7 (403) 276-7050 **Exploration Rock Bit Sales, Ltd.** 6107-103rd Street Edmonton Alberta T6H 2H3 (403) 436-7122 **Futros Equipment Canada, Inc.** 135 Paramont Road Winnipeg Manitoba R2X 2W6 (204) 632-9124 **Eastern Carbide Tools, Ltd.** Pt. Edward Industrial Park P.O. Box 1411 Sydney Nova Scotia B1P 5Z0 (902) 539-7090

Rockwell International of Canada 41 Massey Road P.O. Box 606 Guelph Ontario N1H 6L3 (519) 821-4880 Branches: 4411 Manitoba Road South East Calgary Alberta T2G 4B9 (403) 287-2670 Suite 211 970 Montée de Liesse St. Laurent Québec H4T 1W7 (514) 337-9110 45 West 7th Avenue Vancouver British Columbia V5Y 1L4 (604) 874-8211—gas products (604) 874-8224—water products

Ronan Engineering 32 Bermondsey Rd. Ontario M4B 1Z5 (416) 752-0310

Rosemount Analytical 2400 Barranca Rd. Irvine CA 92714 (714) 546-8700 Branch: 426 Dollard Ave., #105 LaSalle Quebec H8N 1S6 H8N 1S6 (416) 678-1000

Roth Pump P.O. Box 910 Rock Island Illinois 61201 (309) 787-1791 Representatives: **Graham Company** P.O. Box 9 St. John New Brunswick E2L 3X1 (506) 652-2100 **TADCO Engineering Ltd.** P.O. Box 253 Etobicoke Ontario M9C 4V3 (416) 276-8018 **Thermal Engineering Sales, Ltd.** 4240-91A Street Edmonton Alberta T6E 5V2 (403) 463-0933

Roto Aire Dist. Can. 7710 Kingsway Burnaby B.C. V3E N3E 526-9761

Russelectric South Shore Park Hingham MA 02043 (617) 749-6000 **Distributor: Robert Begg Ltd.** P.O. Box 780 Thornhill Ontario L3T 4A5 (416) 495-0581

S

Safety Supply Canada 214 King St. E. Toronto Ontario M5A 1J8 (416) 364-3234

Saftronics Box 1749 53 Victoria Rd. Guelph Ontario N1H 6Z9 (519) 836-6301 Branches: 149 Denison Markham Ont. (416) 492-8194 16 Packham Road Stratford Ont. (519) 271-6980

Sarems Lighting 10700 Parkway Blvd. D'anjou Quebec H1J 1R6 (514) 683-8548 Branches: 530 Champagne Drive Downsview Ontario M3J 2T9 (416) 636-9881 301-873 Beatty Vancouver B.C. V6B 2M6 (604) 687-4541 3519 Doveridge Drive S.E. Calgary Alberta T2B 2B2 (403) 272-1949 14 Stanley Drive St. Albert Alberta T8N 0J7 (403) 458-4840 636 Sherene Terrace London Ontario N6H 3K1 (519) 471-3590 123 Pinehouse Dr. Suite C Saskatoon Sask. S7K 4J7 (306) 242-4641 404-115 Bannatyne Ave. E. Winnipeg Manitoba R3B 0R3 (204) 943-0510 P.O. Box 4483 St. John's Nfld. A1C 6C8 (704) 753-6674

Scarborough & Grant 30 LePage Court Downsview Ontario M3J 1Z9 (416) 633-4130

Schlegel Canada P.O. Box 218 514 South Service Rd. Oakville Ont. L6J 5A2 (416) 845-6657 Toll Free Ont. & Que. 1-800-268-5039

Schramm 800 E. Virginia Ave. West Chester PA 19380 (215) 696-2500 Representatives: **Marig Inc.** Suite 230, 3300 Boul. Cavendish Montreal P.Q. H4B 2M8 (514) 487-1055 **Cubex B.C. Ltd.** #1-12180 Horseshoe Way Richmond B.C. V7A 4S5 (602) 271-2551 **Cubex Ltd.** 991 Jarvis Avenue Winnipeg Manitoba R2X 0A1 (204) 589-4354 **Ray-Gordon Equipment Ltd.** 21 Milvan Drive Weston Ontario M9L 1Y8 (416) 742-3190 **T.P.S. Industries, Inc.** 62 Goshen Street Tillsonburg Ontario N4G 4J1 (519) 842-7351 **Wainbee Limited** 215 Brunswick Blvd. Pointe Claire Quebec H9R 4R7 (514) 697-8610

Schwark 2245 Midland Ave. Scarborough Ontario M1P 4P9 (416) 291-1669

Scientific-Atlanta P.O. Box 105038 Atlanta GA 30348 (404) 449-2301 Branch: 1640 Bonhill Rd., Unit 6 Mississauga Ontario (416) 677-6555

Scyfrom Inc. 128 Sterling Rd. Toronto Ontario M6R 2B7 (416) 535-1151 Distributors: **Argo Engineering** 7916-116th Street Delta B.C. V4C 5T7 (604) 943-9815 TELEX: 04-355709 **Atlantic Specialties Ltd.** P.O. Box 497 Mount Pearl St. John's Newfoundland A1N 2W4 (709) 368-8639 TELEX: 016-3196 **Cecco Supply Ltd.** 20 Towerline Place London Ontario N6E 2T1 (519) 681-1200 **Cecco Supply Ltd.** P.O. Box 607 Sarnia Ontario N7T 7J4 (519) 336-4990 **Dock Specialist & Equipment** Company Limited 1121 Bellamy Road North Unit #1 Scarborough Ontario M1H 3B8 (416) 438-6676 **Farwil Corporation** 10528-123rd Street Edmonton Alberta T5N 1P1 (403) 482-7181 TELEX: 037-2009 **Farwil Corporation** 3518D-62 Avenue S.E. Calgary Alberta T2G 1Z8 (403) 279-2850 TELEX: 038-27534 **Glenridge Sales & Equipment Co. Ltd.** 120 Ottawa St. North, Suite 206 Kitchener Ontario N2H 3K4 (519) 576-5150 **Intercity Industrial Supply** P.O. Box 3140 669 Squier Street Thunder Bay Ontario P7B 5G6 (807) 345-2324 TELEX: 073-4618 **Kernic Equipment Sales Ltd.** P.O. Box 53 Burlington Ontario L7L 3X8 (416) 637-3232 TELEX: 061-8779 **King Materials Handling Ltd.** P.O. Box 2482 Walkerville Postal Station Windsor Ontario N8Y 4S2 (519) 255-9224 TELEX: 064-77721 **Ottawa Awning & Canvas Co.** 883 Boyd Ave. Ottawa Ontario K2A 2E2 (613) 725-3097 **Quality Storage Equipment** 70 Mark Street Sault Ste. Marie Ontario P6A 3M2 (705) 254-6235 TELEX: 067-77245 **Quality Storage Equipment** P.O. Box 2071 Sudbury Ontario P3A 4R8 (705) 675-2350 **J.H. Ryder Machinery Co. (Eastern) Limited** 3600 Trans-Canada Highway Pointe-Claire Quebec H9R 1B1 (514) 697-3471 TELEX: 058-21652 **Wearing Williams Ltd.** 240 Sauteaux Crescent Winnipeg Manitoba R3J 3T2 (204) 885-4810 TELEX: 07-57741

Sentrol Systems 4401 Steeles Avenue West Downsview Ontario M3N 2S4 (416) 661-7000 Branch: #1, 6325-12th Street, S.E. Calgary Alberta T2H 2K1

Sentry Equipment Box 127 Oconomowoc WI 53066 (414) 567-7256 **Representative: Klenzoid Co. Ltd.** 711 La Joie Ave. Dorval Quebec H9P 1G7 (514) 636-6030

Serfilco 1234 Depot St. Glenview IL 60025 (312) 998-9300

Shaw Industries Ltd. 25 Bethridge Road Rexdale Ontario M9W 1M7 (416) 743-7111 TELEX 06-989436 Branches: 500-4th Avenue S.W. Calgary Alberta T2P 2V6 (403) 263-2255 TELEX 038-21734 Hwy. 53 and Nebo Road Hamilton Ontario L0R 1P0 (416) 385-3183 TELEX 06-18865 Hwy. 140 and Ridge Road Welland Ontario L3B 5R3 (416) 735-0066 TELEX 06-15439 Pasqua Street North Regina Saskatchewan S4P 3C2 (306) 543-2552 TELEX 071-2249 10275-21st Street Edmonton Alberta T6P 1P3 (403) 467-5501 TELEX 037-2500 9229 Barlow Trail S.E. Calgary Alberta T2C 0E0 (403) 279-4415 TELEX 038-21888 12905-80th Avenue North Surrey British Columbia V3W 3B1 (604) 594-0401 TELEX 043-51121 Tradewinds Barge Coal Harbour Vancouver British Columbia V6B 4B2 (604) 689-5166 TELEX 04-55705 2340 Chemin Lucerne Ville Mont Royal Quebec H3R 2J8 (514) 735-4501 TELEX 058-25898 4476-97th Street Edmonton Alberta T6E 5R9 (403) 435-3485 TELEX 037-2536 Airport Road Huntsville Ontario P0A 1K0 (705) 789-2363 TELEX 068-75556

Shortridge Instruments 14609 N. Scottsdale Rd. Scottsdale AZ 85260 (602) 991-6744

Siemens Electric 7300 Trans-Canada Highway P.O. Box. 7300 Pointe Claire Que. H9R 4R6 (514) 695-7300 Branches: 6143-4th Street S.E. Calgary Alta. T2H 2H9 (403) 252-2278 TELEX 038-25624 9829-45th Avenue Edmonton Alta. T6E 5C8 (403) 436-6640 TELEX 037-2300 P.O. Box 9049, Station "A" Halifax N.S. B3K 5M7 (902) 443-5071 TELEX 019-22739 150 Katimavik Drive Kanata Ont. K2L 2N2 (613) 592-2477 TELEX 053-3658 1990 ouest, boul. Charest Ste-Foy Qué. G1N 4K8 (418) 681-7393 501 Oakdale Road Downsview Ont. M3N 1W7 (416) 743-8844 TELEX 06-527150 690 W.-7th Ave. Vancouver B.C. V5Z 1B5 (604) 879-0671 TELEX 04-55324

Sihi Pumps 225 Speedvale Ave. W. Guelph Ont. N1H 6L8 (519) 824-4600

Silonex 2150 Ward St. Montreal Que. H4M 1T7 (514) 744-5507

Simplex Int'l Time Eq. 6300 Viscount Rd. Mississauga Ont. L4V 1H3 (416) 677-2000 Branches: 8570 Fraser Street Vancouver British Columbia V5X 3Y3 (604) 324-4466 3-1715-27 Avenue North East Calgary Alberta T2E 7E1 (403) 277-2207 4141-98th Street Edmonton Alberta T6E 5N5 (403) 463-4940 2909 Saskatchewan Drive Regina Saskatchewan S4T 1H4 (306) 525-8808 West Row Industrial Mall 1467 St. James Street Winnipeg Manitoba R3H 0W9 (204) 774-1946 1105 Barmac Drive Weston Ontario M9L 1X4 (416) 742-0294 515 Arvin Ave. Stoney Creek Ont. L8E 2N1 (416) 560-0995 1665 Russell Road Bldg. #2, Unit #12 Ottawa Ontario K1G 0N1 (613) 521-2851 192 Joseph Zatzman Drive, Suite B Dartmouth Nova Scotia B3B 1N4 (902) 466-7415

Singer Company of Canada 3037 Derry Road West Milton Ontario L9T 2X6 (416) 878-2361 Branches: 3960 Notre Dame Street Suite 300 Chomedey, Laval Quebec H7V 1S1 (514) 687-1661 Mayland Office Park #3 Suite 103, 31 Manning Cresc. N.E. Calgary Alberta T2E 7M9 (403) 235-5141 9919-65th Avenue Edmonton Alberta T6E 0L1 (403) 434-8705

Sirco Products 8815 Selkirk Street Vancouver B.C. V6P 4J7 (604) 261-9321 Representatives: **Can-Am Instruments Limited** 1938 Mattawa Avenue, Mississauga Ontario L4X 1K1 **West Isle Industries Ltd.** 5795 Donahue Street St. Laurent, Montreal Quebec H4S 1C4 **Quantime Inc.** CP 201, Snowdon Post Office Montreal Quebec H3X 3T4 **PMI Ltd.** 8707-50th Avenue Edmonton Alberta T6E 5H4

Skan-A-Matic P.O. Box S Elbridge N.Y. 13060 (315) 689-3961 **Representative: CSI Controls Ltd.** 50 Bullock Dr., Unit 5 Markham Ontario L3P 3P2 (416) 294-5274

Slant/Fin 100 Forest Drive at East Hills Greenvale New York 11548 (516) 484-2600 Branch: 6450 Northam Drive Mississauga Ont. L4V 1H9 (416) 677-8400

Soget 791-793 Lajoie Dorval Quebec H9P 1E7 (514) 636-8190

Solar Centre #205-8475 Ontario St. Vancouver B.C. V6X 3E8 (604) 324-1442

Solar Turbines Canada Suite 420, 1 pl du Commerce Nuns Island Verdun Que. H3E 1A2 (514) 769-2753 Branches: Suite 3000, Bow Valley Square 2 205-5th Ave S.W. Calgary Alberta T2P 0V7 (403) 261-2640 8612-24th Street P.O. Box 5630, Stn. L Edmonton Alberta T6C 4G1

Solarsystems Industries #2-11771 Horseshoe Way Richmond B.C. V7A 4S5 (604) 271-2621

Solartech 39 Cranfield Road Toronto Ontario M4B 3H6 (416) 752-4990

Solid Waste Management 155 Navy St., Ste 1207 Oakville Ontario L6J 2Z7 (416) 844-3631

Solidyne 205 W. 35th St. National City CA 92050 (714) 427-9640

Sommers Motor General or Sales Box 548, 35 Elizabeth St. Tavistock Ont. N0B 2R0 (519) 655-2396

Specialty Chemicals 270 Industrial Parkway Aurora Ontario Branches: 207 Place Frontenac Pointe Claire Quebec H9R 4Z7 (514) 697-6767 80 Colonnade Rd. Ottawa Ontario K2E 7L2 (613) 226-0277

Sprague Electric of Canada 49 Bertal Road Toronto Ontario M6M 4M7 (416) 766-6123 Branch: 85 Albert Street Ottawa Ontario K1P 6A4 (613) 238-2542

Spraycool 50 Mississauga Vly. Bl. #817 Mississauga Ontario L5A 3B2 279-3072

Square D Canada 6303 Airport Road Mississauga Ontario L4V 1S2 (416) 678-7000 Branches: General Delivery Torbay Nfld.

Suppliers

A0A 3Z0 7071 Bayers Rd. Ste. #13 Halifax N.S. B3L 2C2 39 Rue Industrial St. Dieppe N.B. E1A 2B9 59 Est Des Bouleaux Apt. 105 Quebec P.Q. G1L 1T6 825 Rue Bancroft Pte. Claire P.Q. H9R 4L6 1481 Heron Rd. Ottawa Ont. K1V 6A6 78 Catharine St. N. Hamilton Ont. L8R 1J2 554 Parkside Dr. Waterloo Ont. N2L 5V4 24 Black Friar's Rd. St. Catharines Ont. L2N 2N1 280 Maitland St. London Ont. N6B 2Y6 504 Victoria Ave. Windsor Ont. N9A 4M8 #3-2065 Logan Ave. Winnipeg Man. R2R 0J1 259 A.E. Adams Crs. Saskatoon Sask. S7K 5M8 #205-1035-64th. Ave. S.E. Calgary Alta. T2H 2J7 12825-144 St. Edmonton Alta. T5L 4N7 #113-7400 McPherson Ave. Burnaby B.C. V5J 5B7

Standard Equipment Co. 9240 N. 107th Street Milwaukee Wisconsin 53224 (414) 355-9730 **Representative: Infrared Inspection Service** 194 Yonge Street Newmarket Ontario L3Y 4V8 (416) 898-5822

Star Systems 101 Kershaw Street Timmonsville South Carolina 29161 (803) 346-3101 TELEX 810-680-2531 **Representative: Dur-Pro Ltd.** 1600-50 J me Avenue Lachine Montreal H8T 2V5 (514) 631-4057 TELEX 05-821752

STC Controls Gen. Del. 94 Cochrane Cres. Cochrane Alta. T0L 0W0 (403) 932-4325

Sterling Power System 799 Rennie St. P.O. Box 3313, Stn. C Hamilton Ont. L8H. 7L4 (416) 547-2345

Sternson P.O. Box 130 Brantford Ontario N3T 5N1 (519) 759-6600 Branches: 7755 Venture Street Burnaby British Columbia V5A 1T9 (604) 420-5731 1402-8th Street Nisku Alberta T0C 2G0 (403) 955-2866 66 Hymus Road Scarborough Ontario M1L 2C7 (416) 752-8240 403 LeBeau Blvd. St. Laurent Quebec H4N 1S2 (514) 332-9922

Stickle Steam Spec. Co. 2215 Valley Ave. Indpls. IN 46218 (317) 636-6563

Stran Steel Building Systems 105 Industrial Road Richmond Hill Ontario L4C 2Y4 (416) 884-9117 Branches: **Westeel-Rosco** 8750 Ash St. Vancouver B.C. V6P 6C7 (604) 321-4311 **Westeel-Rosco** 6210 75th Street P.O. Box 5740, Stn. 'L' Edmonton Alberta T6C 4G2 (403) 468-4909 **Westeel Rosco** Box 1123 Terminus Quebec City P.Q. G1K 7C3 (418) 522-6492 **Stran Steel Building Systems** R.R. #9 Fredericton N.B. E3B 4X9 (506) 455-1634 **Stran Steel Building Systems** 50 Langevin Cres. West Hill Ont. M1C 2B6 (416) 284-0991

Sugar Hut Hill Holdings P.O. Box 105 Manotick Ontario K0A 2N0 (613) 692-2166

Sun Ray Solar Systems 2429 Seminole St. Windsor Ont. N8Y 1X2 (519) 253-1182

Sunsau 640 S. Union St. Lawrence Mass. 01843 (617) 687-0044

Suntrap Systems 500 York Rd. Guelph Ont. N1E 3J4 (519) 822-2762

Superseal 5575 Boul. Laurier P.O. Box 396 Ste.-Hyacinte Que. J2S 7B9 (514) 773-7411

Surgeonics 155 Kisco Ave. Mt. Kisco N.Y. 10549 (914) 241-3203 **Representative: E.S. Gallagher Sales Limited** 44 Eugene St. Toronto Ontario M6B 3Z4 (916) 789-5385

Syncro Flo 721 Miami Cr. Atlanta GA 30324 (404) 266-0467 Representatives: **Jenkinson and Company, Inc.** 23 Chauncey Avenue Toronto Ontario (416) 233-6245 **J. R. Stephenson LTD** P.O. Box 3336 Station D Edmonton Alberta T5L 4J2 (403) 454-4596 **J. R. Stephenson LTD** 555 Madison Street Winnipeg Manitoba R3H 0L6 (204) 775-8561 **J. R. Stephenson LTD** P. O. Box 1580 Regina Saskatchewan S4P 3C4 (306) 569-0654 **J. R. Stephenson LTD** 407A-44th Street East Saskatoon Saskatchewan S7K 0V9 (306) 242-1231 **J. R. Stephenson LTD** 3624 Manchester Road Calgary Alberta T2G 3Z5 (403) 287-1930

Synerco Systems For Energy Conservation 639 St-Jacques Granby Quebec J2G 3P6 (514) 372-7943

T

Taco (Canada) 3090 Lenworth Dr. Mississauga Ontario L4X 2G1 (416) 625-2160

Tanner Systems of Canada PO Box 87, East Hwy. 23 Sauk Rapids MN 56379 (612) 252-8877 TELEX 29-0716 Representatives: **TG Mechanical Products, Ltd.** 3225 Mainway Drive Burlington Ontario L7M 1A6 (416) 335-1440 **Production Supply Co., Ltd.** 19829-99A Ave. Langley B.C. V3A 4P8 (604) 888-1552 **Production Supply Co., Ltd.** 8831-50th Ave. Edmonton Alberta T6B 1E7 (403) 468-3431 **Production Supply Co., Ltd.** 423 Manitou Rd. S.E. Calgary Alberta T2G 4C2 (403) 287-1275 **Production Supply Co., Ltd.** 1259 Clarence Ave. Winnipeg Manitoba R3T 1T4 (204) 453-4849 **Dominion Bridge Co., Ltd.** P.O. Box 578, 845 Logan Ave. Winnipeg Manitoba R3C 2K2 (204) 947-0111 **R. A. Warren Equipment, Ltd.** R.R. #2, Hwy. 11 No. North Bay Ontario P1B 8G3 (705) 474-2331 **R. A. Warren Equipment, Ltd.** 66B Lorne St., P.O. Box 1149 Sudbury Ontario P3E 4S6 (705) 675-5326 **Rab Engineering, Ltd.** 4626 Burgoyne St. Mississauga Ontario L4W 1G2 (416) 625-7811 **National Bearing, Ltd.** 716 Renaud Ave. Dorval Quebec H9P 1H5 (514) 631-9441 **National Bearing, Ltd.** 529 Quebec St. Sept Isles Quebec G4R 1K1 (418) 962-9718 **National Bearing, Ltd.** 118 Humphrey, Bruno Plaza Labrador City Newfoundland A2V 2J8 (709) 494-9661-2-3 **Coastal Equipment Agencies, Ltd.** 188 Joseph Datzman Drive Dartmouth Nova Scotia B3B 1N4 (902) 469-0030

Tapecoat of Canada 25 Haas Rd. Rexdale Ontario M9W 3A1 (416) 743-8705

Tasso 5175 de Maisonneuve West Montreal Quebec H4A 1Z3 (514) 488-4902

Tecnecon Electronics Inc. 1760 Midland Scarborough Ontario M1P 3C2 (416) 759-3622

Tekelek 67 Lewis Rd. Guelph Ontario N1H 1E3 (519) 821-9840

Tel-Tru Manufacturing 408 St. Paul St. Rochester NY 14605 (716) 232-1440 **Representative: Brian Engineering Inc.** 2445 Duncan Rd. Montreal Que. H4P 2A2 (514) 735-1671

Teledyne Analytical Instr. 16830 Chestnut Street City of Industry CA 91749 (213) 961-9221 Representatives: **Westech Industrial** 169 Seneca Rd. Sherwood Park Alberta (403) 252-8803 **P.F. Vermeer Ltd.** 85 Ferrier St., Unit 5 Markham Ontario L3R 2Y9 (416) 495-1830

Teledyne Inet 2750 W. Lomita Blvd. Torkance CA 90509 (213) 325-5040

Teledyne Laars Canada 480 South Service Rd. W. Oakville L6K 2H4 (416) 844-8233

Telemecanique Canada 580 Lepine Ave. Dorval P.Q. H9P 1G2 (514) 636-9560 Branch: 3791 Victoria Park Ave. Units 6, 7 Scarborough Ontario M1W 3K6 (416) 492-7343

Temprite Ind. 6470 Viscount Rd. Mississauga Ont. L4V 1H3 (416) 678-7780 Branches: 1160 Blair Road, Suite 118A Burlington Ontario L7M 1K9 (416) 335-0540 TELEX 06-18966 317 Adelaide Street South London Ontario N5Z 3L3 (519) 685-0400 TELEX 064-7222 347 Sherbrooke Street, Suite 301 North Bay Ontario P1B 2C1 (705) 476-5071 TELEX 067-76201 610A-70th Avenue South East Calgary Alberta T2H 2J6 (403) 253-1201 TELEX 03-826596 5108-47th Street Leduc Alberta T9E 2Y9 (403) 986-4400 TELEX 037-41441

Tervcon 5584 Tomken Rd. Mississauga Ont. L4W 1P5 (416) 625-5750

Texas Instruments 280 Centre St. E. Richmond Hill Ont. L4C 3G2 (416) 884-9181 Distributors: **Ontor Ltd.** 12 Leswyn Rd. Toronto Ont. M6A 1K3 (416) 781-5286 **Energesis Control Systems** 191 Wellington St. E. Markham Ont. L3P 3B4 (416) 294-5360

Therma-Ray Mfg. PO Box 516, 83 Spencer Plains Rd. Old Saybrook CT 06475 (203) 399-7933

Thermal Energy Devices PO Box 1427, Station B Burlington L7P 4C5 (416) 689-8931

Thermax Canada 39 Main Street Vankleek Hill Ontario K0B 1R0 (613) 678-3322

Thermidaire Corp. (1974) 31 Railside Rd. Don Mills Ontario M3A 1B2 (416) 445-7301

Thermo Electric (Canada) 12 Rutherford Road South Brampton Ontario L6W 3J2 (416) 451-0813 Branches: 8425 Argyll Road Edmonton Alberta T6C 4B2 (403) 468-1661 3005 De Baene Street St. Laurent Montreal P.Q. H4S 1K8 (514) 331-2032 Representatives: **Electro Systems Group** 532 Berry Street Winnipeg Manitoba R3H 0R9 **Northern Columbia Process Equipment** 1234 Marine Drive North Vancouver B.C.

Thermolec Ltd. 2175 Thimens Montreal H4R 1K8 (514) 336-9130 **Distributor: Cadmech Systems** 2112 Thimens St. Laurent Que. H4R 1K8 (514) 337-3612

Thorn Lighting 1400 Meyerside Drive Mississauga Ontario L5T 1H2 (416) 677-4248 Branches: 6908A 6th St. E. Calgary Alberta T2H 2K4 (403) 259-4841 TELEX 03-822850 4632 Boul. Thimens St. Laurent Quebec H4R 2B2 (514) 336-7551 182 West 6th. Ave. Vancouver B.C. V5Y 1K6 (604) 873-3937 TELEX 04-55476 600 Pine Glen Rd. Riverview N.B. (506) 386-2351 1420 Notre Dame Ave. Winnipeg Manitoba R3E 3G5 (204) 774-5223

Time Mark 11440 E. Pine Tulsa Oklahoma 74116 (918) 438-1220 Distributors: **The Pump House** 7004-B 5th St. SE Calgary Alberta T0H 2G3 **Art Rosenblum Sales, Ltd.** 7 Digby Court Willowdale Ontario M2R 2X5 (416) 665-4412

Timeco 1035-26th Street, PO Box 8036 Huntington WVA 25705 (304) 523-5149 **Distributor: Higginson Equipment Sales Ltd.** 1131 Pettit Road, PO Box 5011 Burlington Ontario L7R 3Z4 (416) 335-2211 Toronto 364-1018

Tork Canada 69 Westmore Dr. Rexdale Ontario M9V 3Y7 (416) 745-2662 Representatives: **Esco Sales Ltd.** 2399 Cawthra Rd.—Suite 207 Mississauga Ontario L5A

2W9 (416) 275-9621 **RJS Electrical & Mechanical Sales, Ltd.** 2300 Stevenage Dr. Box 1 Ottawa Ontario K1G 3W3 (613) 822-0772 **PDM Electrical Products, Ltd.** 345 Isabey Street St. Laurent Quebec H4T 1Y2 (514) 342-6585 **PDM Electrical Products, Ltd.** 3885 Boul Hamel C.P. 272 Ancienne-Lorette Quebec G2E 3M3 (418) 871-8039 **J.A Hughes and Associates** 884 Saddle St. Port Coquitlam B.C. V3C 3N2 (604) 872-7217 **Loumond Sales Ltd.** 942 Erin St. Winnipeg Manitoba R3G 2W5 (204) 774-1727 **Q.R. Agencies** 416 1023-15 Ave. SW Calgary Alberta T2R 0S5 (403) 245-2755 **P.O. Box 320** Chester N.S. (902) 275-3297

Toronto Coppersmithing Int'l. 220 Midwest Rd. Scarborough Ont. M1P 3A9 (416) 751-4640 Branch: Torco Engineered Products 3975 North Road Burnaby B.C. V3J 1S2 (604) 421-1963

Toyoda America One World Trade Center Suite 5067 New York NY 10048 Distributors: **Utility & Industrial Supply, Ltd.** 647 Kiddco Street Sarnia Ontario N7T 7J7 **Utility & Industrial Supply, Ltd.** 14 A Taber Road Rexdale Ontario M9W 3A5 **Utility & Industrial Supply, Ltd.** C.P. 120 Succursale Quebec J4H 3W6 **Westech Industrial, Ltd.** 134 Forge Road Calgary Alberta T2H 0S8

Trans Canada Glass 270 S.E. Marine Drive Vancouver B.C. V5W 3T5 (403) 324-8511 Branches: 270 S.E. Marine Drive Vancouver B.C. V5X 2S6 (604) 324-8511 2521 Kenworth Road Nanaimo B.C. V9T 3M4 (604) 758-0111 1960 Dayton Street Kelowna B.C. V1Y 7W6 (604) 860-6522 Box 82 Cranbrook B.C. V1C 4H6 (604) 489-2701 320-28th St. N.E. Calgary Alberta T2A 5R2 (403) 273-1316

Transmation Canada 170 Brockport Drive Rexdale Ontario M9W 5C8 (416) 675-5980 Branch: 1324-11th Avenue S.W., Ste. 309 Calgary Alberta T3C 0M6 (403) 245-8712

Tranter Canada 6700 Finch Ave. W. Rexdale Ont. M9W 5P5 (416) 741-4254

Trecan 4540 Dixie Rd. Mississauga Ont. L4W 1N2 (416) 625-4030 Branch: 1480 Logan Longueuil Que. J4K 1J6 (514) 651-1410

Tremco (Canada) 220 Wicksteed Ave. Toronto Ontario M4H 1G7 (416) 421-3300

Trerice, H.O. 2395 Cawthra Rd. Suite 3 Mississauga Ont. L5A 2W8 (416) 276-2340 Branches: 1935 Huron Church Road Windsor Ontario N9C 2L6 12529-127th Street Edmonton Alberta T5L 1A3 2362A 46E Avenue Lachine Quebec H8T 2P3 **Agents: Atlantic Transfer Heat Limited** Bedford Trade Mart, Unit 3 P. O. Box 1166 Bedford Nova Scotia B0N 1B0 **Chempac Supply Limited** P. O. Box 637, Lochlomond Road, St. John New Brunswick E2L 4A5 **Marcel & Hubert Dufresne** 1150 Galt East Sherbrooke Quebec J1G 1Y5 **Highwood Sales Limited** P. O. Box 723 Regina Saskatchewan S4P 3A8 **Lytle Specialties Limited** 102 King Edward Street East Winnipeg Manitoba R3H 0N8 **Mentec Industrial Equipment Limited** 1149 Vanier Road, Unit 3 Sarnia Ontario N7S 3Y6 **Walmar Mechanical Sales** Div. of KF-RB Agencies Limited Nepean Ontario K2G 0B1 **Northern Mechanical Sales** 242 Covington Street P. O. Box 1073 Garson Ontario P0M 1V0 **Spence Winters Agencies Limited** 412 Elizabeth Avenue P. O. Box 7142, St. John's Newfoundland A1E 1Y3 **Louis P. Truchon Inc.** 1190 N. Dorchester Quebec Quebec G1L 4L8 **Western Air Conditioning Limited #15,** 1916-30th Avenue N.E. Calgary Alberta T2E 7B2 **Western Air Conditioning Limited** 1401 West Broadway Vancouver British Columbia V6H 1H6 **Northern Engineering & Supply Co. Ltd.** 114 Miles Street Thunder Bay Ontario P7C 1J4

Trimax Controls 1180 Miraloma Way Sunnyvale CA 94086 (408) 737-0950 **Distributor: Gen-Tec, Inc.** 2625 Dalton Sainte-Foy Quebec G1P 3S9 (418) 651-8000

U

U.E. Systems 1995 Broadway New York NY 10023 (212) 787-1152 **Distributor: Can Am Instruments** 1938 Mattawa Ave. Mississauga Ont. L4X 1K1 (416) 277-4541

Uehling Instrument 473 Getty Avenue P.O. Box 2157 Paterson N.J. 07509 (201) 742-8710 **Representative: Bestobell Canada Ltd.** 245 Norseman Street Toronto Ontario M8Z 2R5 (416) 231-9216

Union Pump 87 Capital Avenue, S.W. Battle Creek Michigan 49016 (616) 962-6141 Branches: 4211 Mainway Burlington Ontario L7L 5N9 (416) 827-7441 407 Speers Road, Suite 202 Oakville Ontario L6K 3T5 (416) 842-4120 181 Marina Circle Pointe Claire Quebec H9S 4B4 (514) 694-7360 #101, 616 71st Ave., S.E. Calgary Alberta T2H 2R1 (403) 253-9181

United Air Specialists 4440 Creek Rd. Cincinnati Ohio 45242 (513) 891-0400 Branch: 15 Bowes Rd., Unit 14B Concord Ont. L4K 1B1 (416) 669-5000 Representatives: **General Equipment Ltd.** 15 East 4th Avenue Vancouver BC V5T 1G1 (604) 876-8881 **General Equipment Ltd.** 10561 108th Street Edmonton AB T5H 2Z8 (403) 423-4488 **General Equipment Ltd.** Unit 2, Bldg. B 1253 Clarence Avenue Winnipeg MB R3T 1T4 (204) 453-4745 **Tepro Industrial Ltd.** 224 Fleur DeLys Pont Viau Lave PQ H7G 2K7 (514) 389-1379 **General Equipment Ltd.** P.O. Box 5603, Station A Calgary AB T2H 1Y1 (403) 252-9941 **General Equipment Ltd.** P.O. Box 237 Saskatoon SK S7K 3L1 (306) 244-2440 **Henlex Industries Ltd.** 1300 Jules Poitras Blvd. Montreal PQ H4N 1X8 (514) 337-3331

United Electric Controls (Canada) 85 School Street Watertown MASS 02172 (617) 926-1006 Distributors: **Brian Engineering Limited** 99 Rocky Lake Drive Bedford N.S. B4A 2T3 (902) 835-8322 **Brian Engineering Limited** 2445 Duncan Road Montreal H4P 2A2 (514) 735-1671 **E. W. Playford Co. Ltd.** 5851 Upper Lachine Road Montreal H4A 2B8 (514) 489-5383 **E. W. Playford Co. Ltd.** 29 Bayswater Avenue Ottawa Ontario K1Y 2E5 (613) 725-1144 **Annutronics Mechanical Ltd.** 3550 Wolfedale Road, Unit #2 Mississauga Ontario L5C 2V6 (416) 272-1045 **Brian Engineering Limited** 25 Shaft Road Rexdale Ontario M9W 4M3 (416) 248-0226 **Brian Engineering Limited** 3-20 Steckle Place Kitchener Ontario N2E 2C3 (519) 893-7474 **Annutronics Mechanical Ltd.** 46 Royal Crescent Sarnia Ontario H7S 4Z5 (519) 336-8698 **Brian Engineering Limited** 880 Philip Street Sarnia Ontario N7T 1Z6 (519) 337-7591 **Brian Engineering Limited** 735 Harold Crescent Thunder Bay Ontario P7C 5H8 (807) 623-2155 **Haney Agency (1975) Ltd.** 60 Stevenson Road Winnipeg Manitoba R3H 0W7 (204) 632-9161 **Barber Engineering & Controls Ltd.** 5728-1st Street, S.W. P.O. Box 5455, Station A Calgary Alberta T2H 1X8 (403) 252-7651 **NBarber Engineering & Controls Ltd.** 8803-58 Avenue Edmonton Alberta T6E 5X1 (403) 468-6950 **Thos. W. MacKay & Son Ltd.** 1807 Fir Street Vancouver B.C. V6J 3A9 (604) 731-6561

United McGill 200 East Broadway Westerville OH 43081 (614) 882-7401 **Representative: E.H. Price Sales, Ltd.** 619-36th Avenue, N.E. Calgary Alberta T2E 2L8 (403) 277-0787

Uraken Canada 553 Industrial Blvd. St. Eustache P.Q. J7R 5R3 (514) 472-7272

Utica Steam Engine & Boiler Works P.O. Box 45 Center Square PA 19422 (215) 278-0600

Utility & Industrial Supply P.O. Box 999 Sarnia Ont. N7T 7K6 (519) 344-3614 Branch: 14A Taber Rd. Rexdale Ont. M9N 3A5 (416) 743-3303

V

Valcor Engineering One Lawrence Rd. Springfield NJ 07081 (201) 467-8400 **Representative: Finnan Engineered Products Ltd.** 1149 Bellamy Road North Unit 22 Scarborough Ontario M1H 1H7

Valera Electronics 1733 St. Laurent Blvd. Ottawa Ontario K1G 3V4 (613) 526-1660 Branch: 8 Brock Street Brockville Ontario K6V 4E6 (613) 342-0570

Vallance Brown 176 Shaw Street P.O. Box 2016 Hamilton Ontario L8N 3S2 (416) 522-1347 Branches: 265 Tecumseh St. P.O. Box 460 Sarnia Ontario N7T 2L1 (519) 332-1112 131 Dieppe Road P.O. Box 3003 St. Catharines Ontario L2R 7B4 (416) 684-4305 West Front P.O. Box 575 Cornwall Ontario K6H 5T3 (613) 932-0320 238 Gage Ave. N. P.O. Box 2071 Hamilton Ontario L8N 3R5 (416) 544-1900 72 Stafford St. Toronto Ontario M6J 2R9 (416) 363-3143 90Fairview Ave. P.O. Box 2010, Stn. "A" London Ontario N6A 4C5 (519) 438-5161 410 Bank Street Ottawa Ontario K2P 1Y8 (613) 238-8931 256 Attwell Drive Toronto Ontario (416) 675-7070 1156 Lariviere St. Rouyn Quebec J9X 5C4 (819) 762-7721 21 Government Road Kirkland Lake Ontario P2N 3H9 (705) 567-3251

Valv-All Canada 1585 Sedlescomb Dr. Mississauga Ont. L4X 1M4 (416) 624-4096 Branch: **Compresseurs Valv-All Inc.** 6180 Vanden Abeele Ville St. Laurent Que. H4P 1P5

Van Leer Plastics 64 Industrial Parkway P.O. Box 4023 Woburn MA 01888 (617) 935-7850 Distributors: **Guildwood Nordell** 1085 The Parkway London Ontario N6A 2W8 (519) 672-3440 **Jay Nard Holdings** 1-4604-13th St. N.E. Calgary Alberta T2E 6P1 (403) 276-4487 **Suntex Ltd.** 4315 Canada Way Burnaby B.C. V5G 1J3 (604) 430-2491

Vapor Canada 3955 Courtrai Ave. Montreal Quebec H3S 1B9 (514) 342-3210

Vari-Cool/H&C 3555 Airway Dr. Santa Rosa CA 95402 (707) 546-1077 **Representative: Dumill Agency** 717 E. Hasting St. Vancouver B.C. V6A 1R3 (604) 251-1526

Veeder-Root of Canada 26 Fieldway Rd. Toronto Ontario (416) 239-3094

Velan Inc. 2125 Ward Avenue Montreal P.Q. H4M 1T6 (514) 748-7743 Distributors: **Donaldson, Pyrch & Hume** Burnaby B.C. **DPH Industries** Edmonton Alberta **DPH Industries** Calgary Alberta **Lytle Specialties Ltd.** Dartmouth N.S. Montreal Quebec Sarnia Ontario Toronto Ontario

Suppliers

Winnipeg Manitoba Calgary Alberta Edmonton Alberta Stoney Creek Ontario ITT Grinnell Calgary Alberta Dartmouth Nova Scotia Edmonton Alberta Montreal Quebec Nanaimo British Columbia Regina Saskatchewan Richmond British Columbia Sarnia Ontario Stoney Creek Ontario Toronto Ontario Winnipeg Manitoba

Venair 7950 Alfred Anjou Que. H1J 1J1 (514) 354-2230 **Agents: Venaire Inc.** 530 Champagne Drive Downsview Ontario M3J 2T9 (416) 636-7728 **Blair Campbell Agencies** 2460 Kingsway Port Coquitlam B.C. V3H 1T4 (604) 464-6144 **D.A. Robertson Agencies Ltd.** 540 Marjorie Street Winnipeg Manitoba R3H 0S9 (204) 774-1714 **McKenna Agencies Ltd.** 14705, 122nd Avenue Edmonton Alberta T5L 2W4 (403) 454-6502 **Morton Industrial Sales ltd.** 601 Manitou Road S.E. Calgary Alberta T2H 1X3 (403) 243-3421

Venmar 1715 Haggerty Drummondville P. Que. J2C 5P7 (819) 477-6226 Branch: 80 Centennial Road Orangeville Ontario L9W 1P9 (519) 941-3080

Veronics Instruments 2333 Millrace Ct. Mississauga Ontario L5N 1W2 (416) 826-7404

Vibron 1720 Meyerside Drive Mississauga Ontario L5T 1A3 (416) 677-4922 Branches: 1433 Est Rue Fleury Montreal Quebec H2C 1R9 (514) 384-3388 7001 Mumford Road Tower 2 Suite 3030 Halifax Nova Scotia B3L 4R3 (902) 455-3112

Vic Manufacturing 1620 Central Ave. Minneapolis MN 55413 (612) 781-6601

Viking Pump Co. of Canada 661 Grove Ave. Windsor Ontario N9A 6M3 (519) 256-5438 Branches: 2569 De Miniac Street St. Laurent Quebec (514) 332-4824 1184 Sanford Street Winnipeg Manitoba (204) 786-6687 3143 Thunderbird Crescent Burnaby B.C. V5A 3G1 (604) 421-5335 245 Baig Blvd. P.O. Box 942 Moncton New Brunswick (506) 388-4204

Vitec 23645 Mercantile Rd. Cleveland Ohio 44122 (216) 464-4670 Branches: 55 Six Point Road Toronto Ontario M8Z 2X3 (416) 239-8161 Box 23526 Vancouver B.C. V7B 1W2 (604) 872-8106

Vitrerie Mont-Laurier 1242 Route 111 Est Amos Québec J9T 1N1 (819) 732-6431

Vitter International 2217 South 1st Street Milwaukee Wisconsin 53207 (414) 744-0111

Viz Manu. 335 E. Price St. Philadelphia PA 19144 (215) 844-2626 **Representative: H.W. Cowan Canada Ltd.** P.O. Box 268 Richmond Hill Ontario L4C 4Y2 (416) 773-4331

W

Wahl International 5750 Hannum Ave. Culver City Calif. 90230 (213) 641-6931 **Representative: Elkon Electrical Co. Ltd.** 1961-55th Ave. Dorval Quebec H9P 1G9 (514) 636-0510

Wallace Ventilating Equip Co. 10 Dansk Court, Unit 9 Rexdale Ontario M9W 5T8 (416) 675-1477

Water Conditioning Canada 555 Park Street Regina Sask. S4N 5B2 545-6990 Branches: 262 Manitou Drive Kitchener Ontario N2C 1L3 (519) 893-6830 402A-53rd Avenue S.E. Calgary Alberta T2H 0N4 (403) 253-4864

Water Refining 475 Edward Ave. Richmond Hill Ontario L4C 5E5 (416) 698-7374

Watkins & Assoc., S.L. 501 York Mills Rd. Don Mills Ontario M3B 1X7 (416) 444-2913

Waugh Controls 9001 Fullbright Ave. Chatsworth CA 91311 (213) 998-8281 Representatives: 134 Forge Rd., S.E. Calgary Alberta T2H 0S8 (403) 252-8803 Unit #7, 7290 Borbram Rd. Mississauga Ontario L4T 3Y8 (416) 676-145 **Westech Industrial Ltd.** 179 Seneca Road Sherwood Park Edmonton Alberta (403) 464-4740

Weed Instrument Company, Inc. 707 Jeffrey Way Round Rock TX 78664 (512) 258-7043

Weiss Instruments 85 Bell Street W. Babylon N.Y. 11704 (516) 752-1655 Representatives: **Winters Thermogauges** Box 81 Agincourt Ontario M1P 3E6 (416) 296-8805 **MacMor Industries** 50 Myrtle St. Winnipeg Manitoba R3E 2R2 (204) 786-5892

Weiss Usa P.O. Box 660 6340 Dillenburg W. Germany (215) 234-8000

Wellons P.O. Box 381 Sherwood Oregon 97140 (503) 625-6131 Branch: Volcano, Ltd. 4300 Ave. Beaudry St. Hyacinthe Quebec J2S 8A5 (514) 774-5326

Wer Canada 297 Idema Rd. Markham Ontario L3R 1B1 (416) 475-9290 Branch: 182, Perth St. Stratford Ontario N5A 3Y4 (519) 273-3523

Wescraft Manufacturing P.O. Box 200 Saanichton British Columbia V0S 1M0 (604) 652-1131 Branches: 3737 Scott St. Burnaby B.C. V5J 5A7 (604) 438-5540 3261 Westsyde Rd. Kamloops B.C. V2B 7G9 (604) 579-9211 2508 Kenworth Rd. Nanaimo B.C. V9T 3Y4 (604) 758-2441

West Instrument Gulton Ind. Park E. Greenwich R.I. 02818 (401) 884-6800 **Representative: Marcland Instrument** 156 St. Denis St. Lambert Quebec J4P 2G2 (514) 866-4607

West Way 595 Speers Rd. Oakville Ontario L6K 2G4 (416) 844-9781

Westcan Electrical Mfg. 192 Mary Street Brantford Ontario N3S 3C2 (519) 759-2040 Branch: 310 Commercial Drive Vancouver B.C. V5L 3V6 (604) 253-3108

Westeel Rosco 1 Atlantic Ave. Toronto Ontario M6K 1X7 (416) 537-4411 Branches: 5515-40th Street, S.E. P.O. Box 2600, Stn. "M" Calgary Alta. T2P 3C1 (403) 279-2700 Halifax 60 Simmonds Drive Dartmouth N.S. B3B 1P6 (902) 466-2461 6210-75th Street P.O. Box 5740, Stn. "L" Edmonton Alta. T6C 4G2 (403) 469-4909 3022 Osler Street Box 6155, Stn. "D" London Ontario N5W 5R6 (519) 451-9070 Montreal 770 Guimond Blvd. Longueuil Quebec J4G 1S3 (514) 651-8100 Corner Island Hwy. & Fielding Rd. P.O. Box 789 Nanaimo B.C. V9R 5M2 (604) 754-1238 1601 Michael Street Ottawa Ontario K1B 3T7 (613) 745-6831 British Columbia Railway Industrial Site 2001 Industrial Way Prince George B.C. V2N 2K8 (604) 562-5577 1200 de la Canardi re Rd. P.O. Box 1123 Terminus Quebec City P.O. G1K 7C3 (418) 522-6492 540-10th Avenue, East P.O. Box 500 Regina Sask. S4P 3A2 (306) 525-5481 240 Melville Street P.O. Box 1370 Saskatoon Sask. S7K 3P5 (306) 653-0061 3091 Harrison Court R.R. #1 Burlington Ontario L7R 3X4 (416) 335-6960 Southview Drive P.O. Box 6 Site 31 R.R. #4 Sudbury Ontario P3E 4M9 (705) 522-0545 4751 Greig Avenue Terrace B.C. V8G 1N3 (604) 635-6581 R.R. #2 Highway 17 West Box 606 Thunder Bay F Ontario P7C 4W8 (807) 939-2657 1 Atlantic Avenue Toronto Ontario M6K 1X7 (416) 537-4411 8750 Azh Street Box 8037, Stn. "L" Vancouver B.C. V6P 6C7 (604) 325-3251 Mile 910 Alaska Hwy. P.O. Box 4177 Whitehorse Y.T. (403) 668-4300 Winnipeg 450 Desautels Street St. Boniface Man. R3C 2N5 (204) 233-7133 361 Attwell Drive Rexdale Ontario M9W 5C2 (416) 675-2370 345 Attwell Drive Rexdale Ontario (416) 675-7990

Western Research 1313-44 Avenue N.E. Calgary Alberta T2E 6L5 (403) 276-8806

Westinghouse Canada P.O. Box 510 Hamilton Ontario L8N 3K2 (416) 528-8811 Branches and sales offices throughout Canada

Westinghouse Vectrol 110 Douglas Road P.O. Box 819 Oldamar Florida 33557 (813) 955-4621 Branch: Westinghouse Canada 286 Sanford Ave. North P.O. Box 510 Hamilton Ontario L8N 3K2 (416) 528-8811

Westroc Industries 2650 Lakeshore Highway West Mississauga Ontario L5J 1K4 (416) 823-9881 Branches: 6205 Hebert Boulevard Ville Ste-Catherine Quebec J0L 1E0 (514) 632-5440 1200 Empress Street Winnipeg Manitoba R3E 3B4 (204) 786-3426 6715 Ogden Dale Road S.E. Calgary Alberta T2C 2A4 (403) 279-0113 2995 Wall Street Vancouver British Columbia V5K 1B5 (604) 254-1311

Westron 2066 Ave. Chartier Dorval P.Q. H9P 1H2 (514) 631-6708

Wetcom Engineering 222 Midwest Road Scarborough Ontario M1P 3A9 (416) 759-8595

Wilcorp Mfg. 115 Tycos Dr. Toronto Ontario M6B 1W3 (416) 789-1164

Wilgood P.O. Box 1247 Dunnellon Florida 32630 (904) 488-5521, 489-6924

Willer Engineering 422 Consumers Road Willowdale Ontario M2J 1P8 (416) 499-4421

William G. Montgomery Ltd. Unit #23 3135 Universal Dr. Mississauga Ont. L4X 2E6 (416) 625-4096

Wilson Sales, T. W. 2244 Drew, Unit 5 Mississauga Ontario L5S 1B1 (416) 677-8200

Wing Co. 125 Moen Ave. Cranford N.J. 07016 (201) 272-3600

Winter's Thermogauges 2220-3 Midland Ave. Scarborough Ontario M1P 3E6 (416) 291-8805

Wiremold Canada 5915 Atlantic Dr. Mississauga Ontario L4W 1S4 (416) 677-3534

Withers Environmental 3133 Sumner Avenue Burnaby B.C. V5G 3E3 (604) 435-8175 Branch: 1111 Brevik Place Mississauga Ontario L4W 3R7 (416) 625-7566

Woods Fans 5112 Timberlea Boulevard Mississauga Ontario L4W 2S5 (416) 624-8300 Representatives: **Square M Engineering** 3061 Grandview Highway Vancouver B.C. V5M 2E4 (604) 430-2264 **J.R. Stephenson Ltd.** 3624 Manchester Rd. S.E. Calgary Alberta T2G 3Z5 (403) 287-1930 **J.R. Stephenson Ltd.** 11627-145th Street Edmonton Alberta T5M 1V9 (403) 454-4596 **H.V.A.C. Sales** 199 North Leonard Street Regina Saskatchewan S4P 5X5 (306) 545-0477 **J.R. Stephenson Ltd.** 555 Madison Street Winnipeg Manitoba R3H 0L6 (204) 775-8561 **E & M**

Suppliers

Designed Sales & Services 63 Cumberland Cres. London Ontario N5X 1B7 (519) 679-9578 **Devie Environmental** 25 Kelfield St. Rexdale Ontario M9W 5A1 (416) 244-5586 **James Black and Associates** 21 Capital Drive Nepean Ontario K2G 0E7 (613) 226-1213 **Patrick Garreau and Assoc.** 5775 Ferrier St. Montreal Quebec H4P 1N3 (514) 733-9961 **Thermec Limited** P.O. Box 534 65 Prince Albert Rd. Dartmouth N.S. B2Y 3Y8 (902) 463-2032 **Terace Corp.** 897 Kipling Ave. Toronto Ontario M8Z 5H3 (416) 231-6549 **Terace Corp.** 945 Canbriar Heights Drive Sudbury Ontario H4T 1W2 (705) 560-0604 **Terace Corp.** 750 MacCarther Boulevard St. Laurent Quebec H4T 1W2 (514) 337-5086 **Belnac** 826-56 Street E. Saskatoon Saskatchewan S7K 3R8 (306) 242-3844 **Belnac** 837 West Hastings St. Suite 1015 Vancouver B.C. V6C 1C4 (604) 682-6561 **Belnac** 120 Wallinger Ave. Kimberly B.C. V1A 1Y8 (604) 427-4818 **Belnac** P.O. Box 219 Sparwood B.C. V0B 2G0 (604) 425-6247 **Belnac** 3265 Parsons Rd. Edmonton Alberta P6N 1B4 (403) 463-7984 **Belnac** 920-26th Street N.E. Calgary Alta. T2A 2M4 (403) 235-2500 **Belnac** 671-15th Street S.W. Medicine Hat Alberta

Worthington 37 Coats St. Wellaville New York 14895 (716) 593-1234 Representatives: **McRae Engineering Equipment** Unit 21, 2 Thorncliffe Park Drive Toronto Ontario M4H 1H2 (416) 422-3735 **Worthington Canada Ltd.** 4180 Dundas Street, West Toronto Ontario M8X 1Y1 (416) 239-4881 **Worthington Canada Ltd.** 4030-7th Street S.E. Calgary Alberta T2G 2Y8 (403) 243-6046 **Worthington Canada Ltd.** Suite 320 145 West 17th St. North Vancouver British Columbia V7M 1V5 (604) 987-4551

Wright, P.M. 1300 Jules Poitras Montreal H4N 1X8 (514) 337-3331 Branches: 1111 Finch Ave. West Downsview Ontario M3J 2E5 (416) 665-8733 230, 78th Rue, Est. Charlesbourg Que. G1H 1C9 (418) 626-7034

Wright-Austin 1140 Crawford Ave. P.O. Box 7267 Windsor Ontario N9C 3Z1 (519) 255-9740

Wylain Canada 126 East Dr. Brampton Ontario L6T 1C2 (416) 791-3330 Branches: 17 Hazelton Ave. Moncton N.B. E1A 4J6 (506) 855-1156 21 Long Island Dr. Manotick Ontario K0A 2N0 (613) 692-4534 467 Briarhill Ave. London Ontario N5Y 1P3 (519) 455-8780 100 Blvd. Alexis Nihon (875) Montreal P.Q. H4M 2P4 (514) 747-1131 783 Oakdale Dr. Winnipeg Man. R3R 1AZ (204) 832-3464 207 Deerbow Circle S.E. Calgary Alta. (403) 271-3076 1334 St. Stephens Pl. North Vancouver B.C. V7J 3H9 (604) 985-0797

Wynn's Canada 1025 Westport Crescent Mississauga Ontario L5T 1E8 (416) 671-4260

Y

Yarway Canada 287 Speedvale Ave., West Guelph Ontario N1H 1C5 (519) 824-8500 Branches: Room 802, 1039-17th Ave. S.W. Calgary Alberta T2T 0B1 (403) 245-4557 4823 Sherbrooke St. W. Montreal Quebec H2Z 1G7 (514) 935-6424

York Instruments 1262 Don Mills Road, Suite 65 Don Mills Ontario M3B 2W7 (416) 445-1255

York Lighting 1320 Jules Poitras Blvd. Ville St. Laurent H4N 1X7 (514) 334-7860 Branch: 1214 Kamato Rd. Mississauga Ontario L4W 1Y1 (416) 625-8289

York Shipley 1297 Industrial Rd. Cambridge Ontario H3H 4S8 (519) 653-7172

Young Radiator 2825 4 Mile Road Racine WI 53404 (414) 639-1010 Representatives: **Walter Kootow Limited** 2220 Midland Avenue, 3B Scarborough Ontario M1P 3E6 (416) 291-8805 **On-Site Power, Limited** 1935-27th Avenue N.E. Suite 108 Calgary Alberta T2E 7E4 (403) 276-3366 Branch: Norgrad Engineering Sales P.O. Box 11, Station C Winnipeg Manitoba R3M 3S3 (204) 338-5404

Z

Z-Air Fabrication 690 Place Trans-Canada Longueuil Quebec J4G 1P2 (514) 527-4541

Zadex Products Box 602, Stn. B Willowdale Ontario M2K 2P9 (416) 441-2353

Zenith Controls 830 W. 4th St. Chicago Illinois 60609 (312) 247-6400 **Representative: Henderson-Oliver Sales** 572 Fenmar Drive Weston Ontario M9L 2S4 (416) 743-7391

Zero Energy Products 2218 Avenue C North Saskatoon Sask. S7L 6C3 (306) 665-2022

Zero-Max 2845 Harriet Ave. So. Minneapolis MN 55408 (612) 872-6300 **Representative: Edward H. Pope Ltd.** 180 Bartor Road Weston Ontario M9M 2W6 (416) 749-4504

Zimpro Hydro Clear Military Rd. Rothschild WIS 54474 (715) 359-7211 Representatives: **Technoquip Ltd.** 297 Garyray Drive Weston Ontario M9L 1P2 (416) 749-3991 TELEX 0652-7252 **Mandom Corp.** 21 Murray Park Road Winnipeg Manitoba R3J 0C4 (204) 885-5395 **Sanitherm Engineering Ltd.** 767 Powell Street Vancouver B.C. V6A 1H5 (604) 253-4341 **Shadrack Engineering Ltd.** 55 Nugget Avenue, Suite 209 Scarborough Ontario M1S 3L1 (416) 293-3100

3M Canada C.P./Box 5757 London Ontario N6A 4T1 (519) 451-2500 Branches: 95 Akerley Blvd. Unit "E" Dartmouth N.S. B3B 1R7 (902) 463-8870 445 rue Beriot St. Foy Quebec G1P 3A9 (418) 651-6115 1155 Lola Street Ottawa Ontario K1K 4C1 (613) 741-2007 155 Lesmill Rd. Don Mills Ontario M3B 2T8 (416) 449-8010 85 Murr Rd. Winnipeg Manitoba R2X 2X7 (204) 633-6143 642 Henderson Drive Regina Sask. S4N 5X3 (306) 949-0666 1001, 53rd Avenue N.E. Calgary Alberta T2E 6X9 (403) 276-7330 6307 Wagner Rd. Edmonton Alberta T6E 4N4 (403) 468-4222 7100 River Road Richmond B.C. V6X 1X5 (604) 273-2211

Dear Sir,/Monsieur,

REQUEST FOR PRODUCT INFORMATION
DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS

Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:
Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:

(Product/Produit) _____

_____

_____

Please send detailed information to:
J'aimerais donc recevoir de plus amples renseignements sur ce produit:

Name/Nom: _____

Title/Poste: _____

Company/Compagnie: _____

Address/Adresse: _____

Tel./Tél.: _____

Comments/Remarques: _____

_____

_____

_____

Dear Sir,/Monsieur,

REQUEST FOR PRODUCT INFORMATION
DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS

Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:
Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:

(Product/Produit) _____

_____

_____

Please send detailed information to:
J'aimerais donc recevoir de plus amples renseignements sur ce produit:

Name/Nom: _____

Title/Poste: _____

Company/Compagnie: _____

Address/Adresse: _____

Tel./Tél.: _____

Comments/Remarques: _____

_____

_____

_____

Dear Sir,/Monsieur,

REQUEST FOR PRODUCT INFORMATION
DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS

Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:
Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:

(Product/Produit) _____

_____

_____

Please send detailed information to:
J'aimerais donc recevoir de plus amples renseignements sur ce produit:

Name/Nom: _____

Title/Poste: _____

Company/Compagnie: _____

Address/Adresse: _____

Tel./Tél.: _____

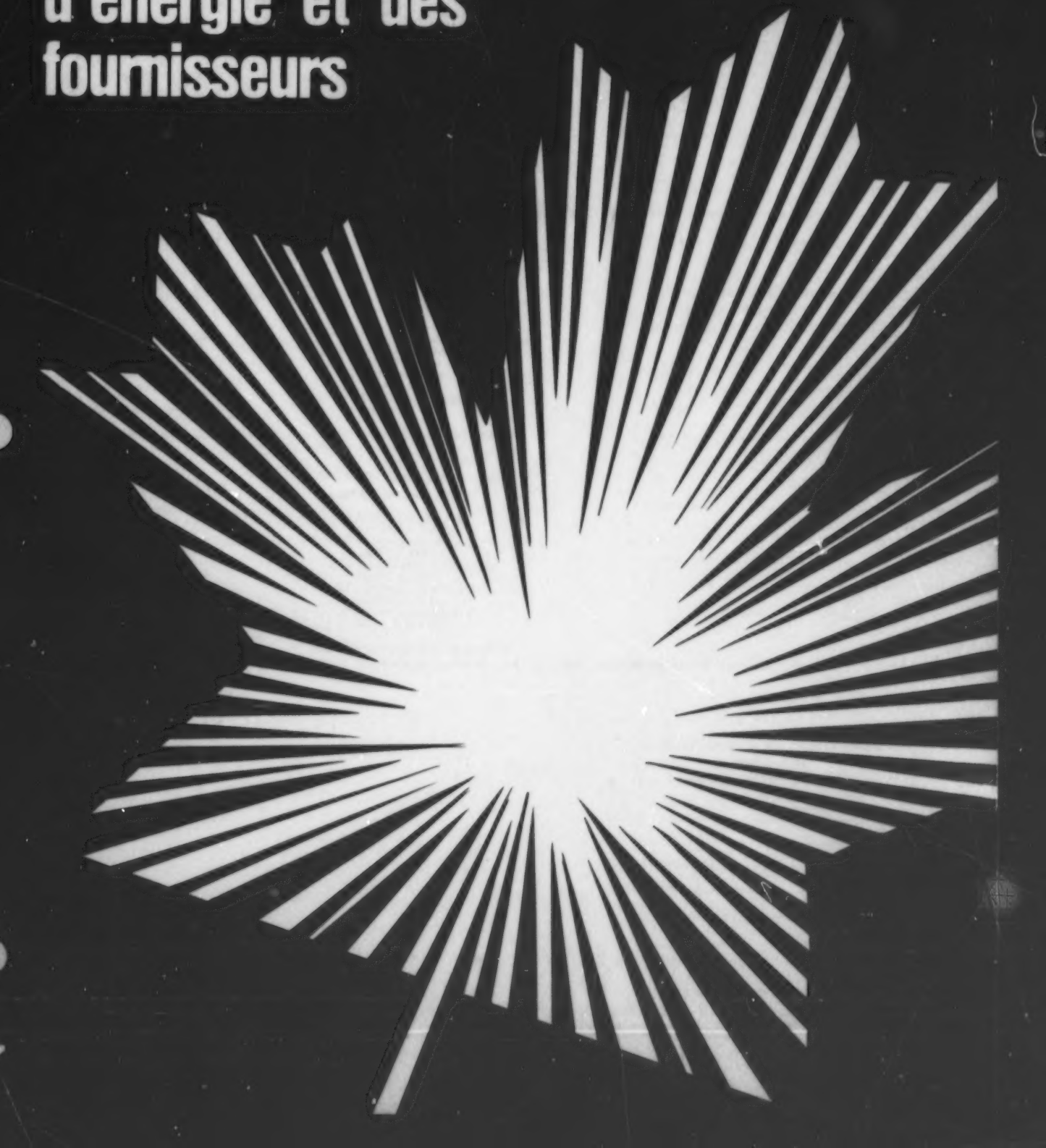
Comments/Remarques: _____

_____

_____

_____

Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs



ADDENDUM

Chapitre 5—Isolation Thermique

Liste des produits

Isolation thermique—par application

01 Enveloppe de l'édifice
02 Chaudières
03 Tuyauterie
04 Réservoirs et autoclaves
05 Autres
06 Couvertures à température élevée
07 Fournaises

Manville Canada Inc 01 02 03 04

Isolation thermique—par matériau

01 Silice de calcium
02 Verre cellulaire
03 Fibre céramique
04 Silice à diatomées
05 Carton-fibre
06 Fibre de verre
07 Carbonate de magnésium
08 Perlite
09 Mousse phénolique
10 Polystyrène
11 Polyuréthane/polyisocyanure
12 Feuille de métal réfléchissante
13 Laine minérale
14 Vermiculite
15 Trousses d'isolation à la mousse

Manville Canada Inc 01 03 04 05 06 08

Isolation thermique—par plage de température

01 Basse température (−100°C à 100°C)
02 Température moyenne (100°C à 230°C)
03 Température très élevée (230°C à 540°C)
04 Température très élevée (540°C à 870°C)
05 Isolant réfractaire (Plus de 870°C)

Manville Canada Inc 01 02 03 04 05

Manville Canada Inc 295 The West Mall Toronto Ontario M9C 4Z7
(416) 626-5200

Monsieur,/Dear Sir,

DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS
REQUEST FOR PRODUCT INFORMATION

Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et de. fournisseurs, en tant que fournisseur de:
Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:

(Produit/Product) _____

_____

_____

J'aimerais donc recevoir de plus amples renseignements sur ce produit:
Please send detailed information to:

Nom/Name: _____

Poste/Title: _____

Compagnie/Company: _____

Adresse/Address: _____

Tél./Tel.: _____

Remarques/Comments: _____

_____

_____

_____

Monsieur,/Dear Sir,

DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS
REQUEST FOR PRODUCT INFORMATION

Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:
Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:

(Produit/Product) _____

_____

_____

J'aimerais donc recevoir de plus amples renseignements sur ce produit:
Please send detailed information to:

Nom/Name: _____

Poste/Title: _____

Compagnie/Company: _____

Adresse/Address: _____

Tél./Tel.: _____

Remarques/Comments: _____

_____

_____

_____

Monsieur,/Dear Sir,

DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS
REQUEST FOR PRODUCT INFORMATION

Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:
Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:

(Produit/Product) _____

_____

_____

J'aimerais donc recevoir de plus amples renseignements sur ce produit:
Please send detailed information to:

Nom/Name: _____

Poste/Title: _____

Compagnie/Company: _____

Adresse/Address: _____

Tél./Tel.: _____

Remarques/Comments: _____

_____

_____

_____

(Nom et adresse du fournisseur/Supplier's name and address)

_____

_____

_____

(Nom et adresse du fournisseur/Supplier's name and address)

_____

_____

_____

(Nom et adresse du fournisseur/Supplier's name and address)

_____

_____

_____

Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs

Publié avec la permission du ministre, Énergie, Mines et Ressources Canada

Des exemplaires sont offerts sur demande aux:

Bureaux des économies d'énergie et des énergies renouvelables listés aux page 9 et 10 de ce repertoire, ou en écrivant à:

Direction de l'économie d'énergie et du remplacement du pétrole
Énergie, Mines et Ressources Canada
580, rue Booth
Ottawa, Ontario
K1A 0E4

Also available in English

Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs

Préambule : Comment utiliser le répertoire 5
Activités dans le domaine de l'économie d'énergie au Canada 7
Comment obtenir les services d'experts 8
Programmes d'aide gouvernementaux 9
Sources de renseignements 12
Chapitre 1 : Enveloppe d'un édifice .. 15
Chapitre 2 : Éclairage 18
Chapitre 3 : Chauffage, aération et climatisation 21
Chapitre 4 : Échange et récupération de la chaleur 24
Chapitre 5 : Isolation thermique 27
Chapitre 6 : Combustion 30
Chapitre 7 : Systèmes à vapeur et condensats 33
Chapitre 8 : Électricité 35

Table des matières

Chapitre 9: Contrôles et instruments 37
Chapitre 10: Compresseurs et turbines 43
Chapitre 11: Gestion des ressources hydrauliques 45
Fournisseurs de produits d'économie d'énergie 47
exique 68

Comment utiliser le répertoire

Ce répertoire a été préparé pour les industries, les commerces et les institutions. Son but est de fournir des renseignements de base, essentiels à l'étude et à la mise sur pied de programmes d'économie d'énergie; ceci se fait par l'identification des secteurs principaux où des économies substantielles d'énergie peuvent être réalisées.

De façon générale, les produits listés au répertoire répondent à l'un des critères suivant:

1) produits réduisant ou contrôlant la consommation d'énergie, directement ou indirectement, dans un édifice, une usine ou un procédé de traitement.
2) produits utilisant l'énergie plus efficacement que d'autres semblables, ou pouvant être utilisés de pair à un produit déjà installé, afin d'en améliorer l'efficacité.
3) produits faisant partie intégrante ou essentielle d'un système d'économie d'énergie.

Les fournisseurs donnant des renseignements sur les produits listés devaient aussi indiquer les voies canadiennes de distribution, précisant les adresses de tous les points de vente au pays. Les produits devaient déjà être disponibles sur le marché canadien et se conformer à toutes les normes canadiennes applicables.

Quels sont les produits offerts pour économiser l'énergie?

Le répertoire est divisé en onze chapitres. Là, vous pourrez y retracer les divers types de produits d'économie d'énergie, pour les formes variées d'énergie.

Supposons, par exemple, que vous vouliez améliorer l'efficacité d'un système d'éclairage:

a) Passez d'abord au *chapitre 2: Éclairage*. Il s'y trouve un sommaire des divers types génériques d'éclairage et des possibilités d'améliorer l'efficacité des systèmes existants.
b) Relevez de la liste, la catégorie de produits dont vous aurez besoin: *luminaires et accessoires—par type*.
c) Relevez la sous-catégorie: *02 sodium, haute pression*.
d) Notez tous les fournisseurs dont le nom est précédé du code *02*.
e) Référez-vous à *la liste des fournisseurs* pour trouver celui qui

se trouve le plus près de vous.

f) Vous pouvez alors soit communiquer directement avec le fournisseur, soit compléter la carte-réponse d'affaires attachée au répertoire pour recevoir des renseignements d'un fournisseur particulier.

Où peut-on trouver un produit particulier?

Si vous savez exactement ce dont vous avez besoin pour vos projets d'économie d'énergie, chaque chapitre possède une liste alphabétique des produits et de leurs sous-catégories.

Voici comment procéder:

1) Relevez l'en-tête que vous désirez. Ex. *Éclairage*.
2) Relevez le groupe général de produits.
3a) Relevez la sous-catégorie et notez-en le code binaire.
b) Identifiez les fournisseurs possédant le même code.
4) Relevez l'adresse des fournisseurs dans la liste en couverture arrière.

Remarque: Les fournisseurs dont les noms sont imprimés en caractères gras ont un point de vente canadien ou plus.

Autres points d'intérêt:

À l'intention des personnes qui sont en train de mettre sur pied de nouveaux programmes de gestion et d'économie d'énergie, nous avons inclus un chapitre traitant des experts et des conseillers, des programmes d'aide gouvernementaux (provinciaux, fédéraux-provinciaux et fédéraux) et des programmes d'économie d'énergie déjà mis sur pied par l'industrie, le commerce et les institutions. Vous trouverez aussi une liste d'associations et autres organismes qui pourront s'avérer une source utile d'information.

Activités dans le domaine de l'économie d'énergie au Canada

Dans le cadre du projet canadien à long terme d'auto-suffisance en énergie et d'indépendance du pétrole importé, tous les secteurs de l'économie ont mis sur pied des programmes de motivation, d'éducation et d'information sur les avantages économiques d'une société soucieuse de l'énergie, avantages bénéficiant les compagnies, les institutions et les individus.

Dans le secteur industriel, des groupes d'étude sur l'économie d'énergie ont, depuis 1975, dirigé des activités maintenant regroupées sous le nom de Programme d'économie d'énergie pour l'industrie canadienne (PEEIC). Chacun des seize secteurs industriels possède son groupe d'étude: produits chimiques, produits électriques et électroniques, équipement de ferme et industriel, métaux ferreux, aliments et boissons, manufacture générale, minerais industriels, machinerie, mines et métallurgie, produits pharmaceutiques à vente libre (sans ordonnance), raffinement du pétrole, plastiques, pâtes et papier, textile, transports et produits du bois. Ces groupes d'étude surveillent 85% de l'énergie utilisée dans l'industrie, soit 25% de la consommation nationale totale. Un conseil des groupes d'étude, formé des présidents de chaque groupe, coordonne les efforts de chaque secteur et publie le résultat des progrès réalisés vers les buts fixés en économie d'énergie.

En 1975, l'industrie s'était fixée comme cible pour les cinq années subséquentes une réduction de la consommation énergétique de 12% par rapport au niveau de 1972. À la fin de 1980, l'industrie avait réalisé une amélioration remarquable de 15,4%. L'économie annuelle d'énergie découlant de ces améliorations équivalait à 307 pétajoules (307×10^{15} joules), ou plus de 50 millions de barils de pétrole brut équivalents.

Les groupes d'étude se sont fixés de nouveaux buts audacieux pour 1985. Ils représentent un véritable défi à l'industrie car elle a déjà épuisé la plupart des possibilités simples et peu dispendieuses d'économiser l'énergie. Bien que chaque secteur industriel ait ses buts particuliers basés sur les facteurs spéciaux affectant leur potentiel de réaliser de plus grandes économies d'énergie, on a établi un cote moyenne de 23% pour l'ensemble de l'industrie.

Du côté commercial et institutionnel, où les édifices à bureaux, les écoles, les hôpitaux, etc, représentent près de 20% de l'énergie totale consommée au Canada, le gouvernement offre plusieurs programmes d'aide. Un groupe d'étude commercial a été mis sur pied au début de 1981. Il a pour but d'encourager la gestion de l'énergie au sous-secteur commercial, établissant

des objectifs d'économie d'énergie, préparant des programmes audio-visuels, des publications et des imprimés d'information générale. D'autres groupes d'étude semblables ont été créés pour les sous-secteurs des édifices à bureau, de l'hygiène et de la santé. On prévoit aussi former d'ici la fin de 1983, des groupes pour les universités, les collèges et écoles communautaires, et la vente au détail. (Selon le rapport de mai 1982, présenté par le comité spécial sur l'énergie alternative et le remplacement du pétrole, on estimait d'après les données de 1973, que le potentiel d'économie d'énergie en chauffage des locaux seulement, serait de 50% en moyenne.)

Comment obtenir les services d'experts

Il pourra être sage, dans certains cas, de se prévaloir des services d'un expert ou de retenir ceux d'un spécialiste du type de projet d'économie d'énergie qui vous concerne. Un choix judicieux et bien réfléchi est d'autant plus important que le nombre d'experts et de conseillers dans le domaine de la gestion de l'énergie croît rapidement.

De façon générale, il s'avère sensé d'utiliser les services d'experts recommandés par d'anciens clients dont les projets étaient semblables à ceux que vous voulez entreprendre.

Vous pouvez aussi établir une liste d'experts-conseils en vous renseignant auprès d'associations professionnelles, chambres de commerce, etc. Une vérification rapide de la qualification de chaque entreprise devrait être suivie d'une demande d'avant-projet portant sur les points suivants:

1) Expérience antécédente—référence à l'appui.
2) Noms et qualifications des responsables du projet.
3) Calendrier prévu.
4) Méthode d'exécution proposée.
5) Connaissance des conditions locales.

De ces négociations résultent habituellement un contrat de services professionnels et les honoraires convenus.

Programmes d'aide gouvernementaux

Les gouvernements fédéral et provinciaux ont établi de nombreux programmes d'aide financière et autre pour les commerces, les industries et les institutions canadiennes.

Alors que les programmes actuels sont constamment modifiés pour répondre aux besoins changeant, on s'affaire aussi à créer de nouveaux programmes. Afin de vous aider à obtenir des renseignements plus complets sur ces programmes, nous vous donnons ci-après, une liste des divers bureaux fédéraux et provinciaux concernés:

Bureaux fédéraux

Terre-Neuve et Labrador

Bureau des économies d'énergie et
des énergies renouvelables
C. P. 65
215, rue Water
St-Jean [Terre-Neuve]
A1C 6C9

Île-du-Prince-Édouard

Bureau des économies d'énergie et
des énergies renouvelables
C. P. 234
98, rue Water
Summerside [Île-du-Prince-Édouard]
C1N 4N6

Nouvelle-Écosse

Bureau des économies d'énergie et
des énergies renouvelables
5151, rue Georges
Halifax [Nouvelle-Écosse]
B3J 1M5

Nouveau-Brunswick

Bureau des économies d'énergie et
des énergies renouvelables
835, rue Champlain
Dieppe [Nouveau-Brunswick]
E1A 1P6

Québec

Bureau des économies d'énergie et
des énergies renouvelables
605, boul. Dorchester ouest
Montréal [Québec]
H3B 1P4

Ontario

Bureau des économies d'énergie et
des énergies renouvelables
2242, boul. Lakeshore ouest
Toronto [Ontario]
M8V 1A5

Manitoba

Bureau des économies d'énergie et
des énergies renouvelables
112/110, rue Osborne sud
Winnipeg [Manitoba]
R3L 1Y5

Saskatchewan

Bureau des économies d'énergie et
des énergies renouvelables
119, 4e Avenue
Saskatoon [Saskatchewan]
S7K 5X2

Alberta

Bureau des économies d'énergie et
des énergies renouvelables
22, avenue Sir Winston Churchill
St-Albert [Alberta]
T8N 1B4

Colombie-Britannique

Bureau des économies d'énergie et
des énergies renouvelables
5021, Kingsway
Burnaby [Colombie-Britannique]
V5H 2E5

Yukon

Bureau des économies d'énergie et
des énergies renouvelables
2078, Second Avenue
Whitehorse [Yukon]
Y1A 1B1

Territoires du Nord-Ouest

Bureau des économies d'énergie et
des énergies renouvelables
C. P. 68
4922, 52e Rue
Yellowknife [Territoires du
Nord-Ouest]
X1A 2N1

Bureaux provinciaux

Terre-Neuve et Labrador

Energy Branch
Department of Mines and Energy
95 Bonaventure Avenue
St. John's, Newfoundland
A1C 5T7

Île-du-Prince-Édouard

Enersave for Industry and Commerce
Department of Tourism -
Industry and Commerce
P.O. Box 2000
73 Rochford St.
Charlottetown, P.E.I.
C1A 7N8

Nouvelle-Écosse

Enersave for Industry and Commerce
Department of Mines and Energy
P.O. Box 668
1649 Hollis Street
Halifax, Nova Scotia
B3J 2T3

Nouveau-Brunswick

Direction générale des économies
d'énergie
Secrétariat de l'énergie
Province du Nouveau-Brunswick
C. P. 6000
Fredericton [Nouveau-Brunswick]
E3B 4A7

Québec

Bureau des économies d'énergie
Ministère de l'énergie et des
ressources
Bureau 600
425, avenue Viger ouest
Montréal [Québec]
H2Z 1W9

Ontario

Energy Group
Ministry of Industry & Trade
7th Floor-Hearst Block
900 Bay St.
Toronto, Ontario
M7A 2E4

Manitoba

Conservation and
Renewable Energy Branch
Department of Energy and Mines
500 Portage Avenue
Winnipeg, Manitoba
R3C 0E9

Saskatchewan

Energy Conservation
Saskatchewan Energy and Mines
1914 Hamilton Street
Regina, Saskatchewan
S4P 4V4

Alberta

Energy Conservation Branch
Industrial Energy Conservation
Program
Alberta Energy and Natural
Resources
10010-106th Street
Edmonton, Alberta
T5L 3L8

Colombie-Britannique

Energy Conservation
Ministry of Energy, Mines &
Petroleum Resources
1177 West Hastings Street
Vancouver, British Columbia
V6E 2L7

Sources de renseignements

Voici une liste d'associations, d'institutions et de sociétés professionnelles qui sera utile aux lecteurs désirant obtenir de plus amples renseignements, soit sur un sujet spécifique, soit sur les fournisseurs en général. Dans le cas d'associations provinciales affiliées à un organisme national, seule l'adresse du siège social canadien est donnée. En communiquant avec ces bureaux, on pourra obtenir plus de détails sur les succursales ou les associations locales.

Air Conditioning & Refrigeration Wholesalers Association of Canada
5468 Dundas Street West, Suite 226, Islington, Ontario M9B 6E3 (416) 239-8191

American Society of Heating, Refrigerating & Air Conditioning Engineers, Inc.
1027 Yonge Street, Suite 303, Toronto, Ontario (416) 925-7873

Architectural Glass & Metal Contractors Association
1 Sparks Ave., Willowdale, Ontario M2H 2W1 (416) 499-4000

Asphalt Roofing Technical Committee
55 York Street, Suite 512, Toronto, Ontario M5J 1S2 (416) 363-8374

L'Association des ingénieurs-conseils du Canada
130, rue Albert, Bureau 616, Ottawa, Ontario K1P 5G4 (613) 236-0569

The Biomass Energy Institute
P.O. Box 129, Station C, Winnipeg, Manitoba R3M 3S7 (204) 284-0472

Building Owners and Managers Association International
325 Howe Street, Suite 601, Vancouver, C.-B. V6C 1Z7 (604) 684-3916

L'Association canadienne des industries du recyclage
5799 Yonge Street, Suite 1101, Willowdale, Ontario M2M 3V3 (416) 221-1191

Canadian Boiler Society
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261

L'Association canadienne de la construction (1914)
85, rue Albert, 2e étage, Ottawa, Ontario K1P 6A4 (613) 236-9455

L'Association canadienne de l'électricité
1, carré Westmount, Bureau 580, Montréal, Québec

Canadian Electrical Contractors Association
161 Eglinton Avenue E., Suite 605, Toronto, Ontario M4P 1J5 (416) 486-1290

L'Association canadienne des distributeurs d'équipement électrique
620 Wilson Avenue, Suite 250, Downsview, Ontario M3K 1Z3 (416) 636-2792

Canadian Energy Research Institute
3512, 33rd St. N.W., Calgary, Alberta T2L 2A6 (403) 282-1231

L'Association canadienne d'énergie fluide
1 Yonge Street, Suite 400, Toronto, Ontario M5E 1J9 (416) 363-7261 Ext. 64

L'Association canadienne du gaz
55 Scarsdale Road, Don Mills, Ontario M3B 2R3 (416) 447-6465

Canadian Gas Research Institute
55 Scarsdale Road, Don Mills, Ontario M3B 2R3 (416) 447-6465

Canadian General Standards Board
Place du Portage III, 11, rue Laurier, Hull, Québec (819) 997-5710

Canadian Heat Exchanger and Vessel Manufacturers Association
2175 Sheppard Ave. E., Suite 110, Willowdale, Ontario M2J 1N8 (416) 491-2886

Canadian Hydrogen Energy Society
15 Toronto Street, Suite 200, Toronto, Ontario M5C 2E3

Canadian National Committee of World Energy Conference
C.P. 4511, Succursale E, Ottawa, Ontario K1S 5B5 (613) 593-4624

L'Institut canadien de plomberie et de chauffage
5468 Dundas Street West, Suite 414, Toronto Ontario M9B 6E3 (416) 232-2600

L'Association canadienne des fabricants de lampes et luminaires Inc.
90, rue Savard, Auteuil, Québec H7H 1M7 (514) 625-0096

L'Association des manufactueriers canadiens
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261

Canadian Property Managers Association
716 Gordon Baker Road, Willowdale, Ontario M2H 3M8

L'Association canadienne des entrepreneurs en couverture
116, rue Albert, Bureau 710, Ottawa, Ontario K1P 5G3 (613) 232-6724

La Société canadienne de génie électrique
2050, rue Mansfield, Bureau 700, Montréal, Québec H3A 1Z2 (514) 842-8121

La Société canadienne de génie mécanique
2050, rue Mansfield, Bureau 700, Montréal, Québec H3A 1Z2 (514) 842-8121

L'Association canadienne de normalisation
178 Rexdale Blvd., Rexdale, Ontario M9W 1R3 (416) 744-4000

Canadian Water Resources Association
P.O. Box 6, East Kelowna, C.-B. V0H 1G9

Canadian Water Systems Manufacturers Association
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261 Ext. 64

L'Association canadienne des manufacturiers de fenêtre et porte
27, Avenue Goulburn, Ottawa, Ontario K1N 8C7 (613) 233-6205

Préambule

Canadian Wood Energy Institute
55 Isabella Street, Toronto, Ontario M4Y 1M8

Caulking Contractors Association
1 Sparks Ave., Willowdale, Ontario M2H 2W1 (416) 499-4000

L'Association charbonnière canadienne
909, 5th Avenue S.W., Suite 210, Calgary, Alberta T2P 0N8 (403) 262-1544

L'Association des manufacturiers d'équipement électrique et électronique du Canada
1 Yonge Street, Suite 1608, Toronto, Ontario M5E 1R1 (416) 862-7152

Electrical Bureau of Canada
1 Yonge Street, Suite 1608, Toronto, Ontario M5E 1R1 (416) 862-7152

Energy Users Counsil
431, 41st Avenue N.E., Calgary, Alberta T2E 2N4

L'Institut canadien des ingénieurs
2050, rue Mansfield, Bureau 700, Montréal, Québec H3A 1Z2 (514) 842-8121 poste 30

Heating, Refrigerating and Air Conditioning Institute of Canada
5468 Dundas Street West, Suite 226, Islington, Ontario M9B 6E3 (416) 239-8191

Illuminating Engineering Society of North America
(Chapitre de la capitale nationale) C.P. 5367, Succ. F, Ottawa, Ontario K2C 3J1

Industrial Gas Users Association
206 ouest, avenue Laurier, Ottawa, Ontario K1P 5J8 (613) 236-8021

Industrial Instrument Manufacturers Association
1 Yonge Street, Suite 1400, Toronto, Ontario M5E 1J9 (416) 363-7261

Institute of Electrical and Electronic Engineers, Inc.
(Bureau régional canadien) 7061 Yonge St., Thornhill, Ontario L3T 2A6 (416) 881-1930

Institute of Power Engineers
920 Yonge Street, Suite 216, Toronto, Ontario M4W 3C7 (416) 922-6615

Mechanical Contractors Association of Canada
116, rue Albert, Bureau 408, Ottawa, Ontario K1P 5G3 (613) 232-0492

Propane Gas Association of Canada
500, Fourth Ave. S.W., Suite 1202, Calgary, Alberta T2P 2V6 (403) 263-0450

L'Institut royal d'architecture du Canada
151, rue Slater, Bureau 1104, Ottawa, Ontario K1P 5H3 (613) 232-7165

Société d'énergie solaire du Canada Inc.
870 Cambridge Street, Suite 303, Winnipeg, Manitoba R3M 3H5 (204) 284-3076

Thermal Insulation Association of Canada
130 Bloor Street West, Suite 1101, Toronto, Ontario M5S 2X7 (416) 964-3656

Enveloppe d'un édifice

Pression négative

Plusieurs édifices opèrent sous une pression négative. Cela se produit lorsqu'on ajoute des échappements d'air sans fournir d'admissions supplémentaires pour compenser. La pression négative ainsi créée entraîne des infiltrations d'air par toutes les ouvertures possibles et ajoute à la charge du système de chauffage ou de climatisation.

Étanchéité à l'air

Un fois l'équilibre échappement-admission d'air établi (chapitre 3, Chauffage, aération et climatisation), on devrait vérifier l'enveloppe de l'édifice pour s'assurer qu'il n'y a ni infiltration, ni fuite. Les joints et le calfeutrage devraient être réparés au besoin. On devrait chercher à rendre l'édifice aussi *étanche à l'air* que possible. Les produits à base de caoutchouc utilisés dans la construction de nouveaux édifices conviennent très bien aux rénovations. Il y a aussi d'autres matériaux dont la mousse de polyuréthane, injectée par des orifices, les joints en rouleau, qui s'installent aux chambranles de portes et des fenêtres, ou encore, les pellicules de polypropylène. Ces pellicules possèdent une encoche longitudinale et sont pré-encollées.

Portes et ouvertures

Un point important est d'établir si certaines portes ou fenêtres sont nécessaires; sinon, cela vaut-il la peine de les obturer. Les bouches d'aération saisonnières représentent une autre source de pertes si elles sont ouvertes lorsqu'on en n'a pas besoin. Parmi les plus grandes causes de pertes excessives d'air, on retrouve les portes donnant à l'extérieur et les quais de livraison. Ceci est vrai surtout pour les édifices à plusieurs étages où le flottement de l'air chaud crée un effet de cheminée, causant des pertes si les étages supérieurs ne sont pas étanches à l'air.

Divers types de *portes* aideront à éviter les pertes de chaleur: portes automatiques à charnières ou coulissantes, n'ouvrant que lorsqu'elles sont activées par des véhicules ou des personnes; portes pliantes sur coulisses ou portes accordéon sur rouleaux, n'ouvrant que de la grandeur voulue; portes *isolées* composées de sections rigides; et portes flexibles à charnières.

Des barrières faciles à traverser mais qui, par exemple, isoleraient les sections réfrigérées d'un entrepôt, peuvent être créées en apportant des *modifications aux portes*: portes en bandes, *rideaux en bandes*, *rideaux d'air* et rideaux d'air chauffé. Les *cloisons flexibles* et les abris de quais aideront aussi à réduire les pertes de chaleur lors du chargement et déchargement des véhicules.

Murs et toitures

La réadaptation de l'isolation d'édifices pourra être coûteuse à moins qu'il y ait, en même temps, d'autres travaux importants de rénovation. Il y a bien sûr quelques exceptions spécifiques tel qu'ajouter un isolant lorsqu'il y a des plafonds suspendus ou des combles ouverts. Si on entreprend des travaux de *recouvrement de la toiture*, on peut alors ajouter des panneaux isolants ou encore couler un isolant léger entre l'ancienne toiture et la nouvelle. Il existe aussi certains produits permettant d'ajouter des panneaux de styrène imperméables sur la face intérieure ou extérieure des murs d'un édifice. Lors de

telles additions ou modifications, il est extrêmement important de vérifier l'état des coupe-vapeur si l'on veut que le système soit efficace. Il existe un système de recouvrement industriel et commercial qui s'installe à un angle, permettant ainsi l'égouttement des toits plats.

Fenêtres

Ajouter une double-vitrerie ou apporter d'autres *modifications aux fenêtres* pourra s'avérer avantageux dans certains entrepôts, entreprises, commerces ou institutions de petite envergure. Dans le cas d'édifices où l'éclairage, les employés ou le procédé de traitement dégagent une grande chaleur interne, réduire les pertes de chaleur pourra causer un certain inconfort.

Il existe une grande variété d'accessoires pour les fenêtres: écrans, pellicules solaires, pellicules réfléchissantes transparentes, vitrage, double-vitrerie et une plage d'*accessoires isolants et servant à ombrer* tels les stores, les jalousies, les rideaux, les volets et autres isolants mobiles. L'isolant peut se trouver à l'extérieur, à l'intérieur ou entre les panneaux de verre.

Liste des produits

Contrôle de l'étanchéité à l'air

01 Matériaux
02 Systèmes

Abisko Mfg. Inc. 01
Bally Refrigeration of Canada 01
Can-Am Air Leakage Control Systems 01 02
Coldstream Products of Canada Ltd. 01 02
Condecor Prod. Ltd. 01 02
Drummond Metal Products Ltd. 01
Enar-Corp Management Limited 01 02
Energy Control Centre 01 02
Energy-Wise 2000 Inc. 01 02
GTE Products Corp. 01 02
Golden Triangle Windows Ltd. 01
Graham Products Limited 01
Hanson Inc. 01
Hewlett Packard Canada Ltd. 02
Insta-Foam Products Inc. 01
Jacobs & Thompson Inc. 01
Liquiframe 01 02
Miniveil Ltd. 02
Plasti-Fab Ltd. 01
RCR 01
Raple 02
Schlegel Canada 01
Solar Centre 02
Stran Steel Building Systems 02
Tapecoat of Canada 01
Zero Energy Products 01 02
3M Canada 01

Portes isolées

01 Conventionnelles
02 Entretien

Alcan Building Products 01
All Glass Inc. 01 02
B. Dumenil Enterprises Inc. 01
Bally Refrigeration of Canada 01 02
Canuck Garage Doors Co. 01 02
Coldstream Products of Canada Ltd. 02
Custom Glass Ltd. 01
Energy Control Centre 02
Golden Triangle Windows Ltd. 01
J-Tak 01
Loewen Millwork 01
N. Pollard & Son 01
N.A.P. Ltd. 01
Paramount Glass & Millwork 01 02
Raple 01
Reynolds Extrusion 01
Robert Hunt Corp. 01
S.W. Fleming Ltd. 01 02
Scyfrom Inc. 02
Supercool 01

Modifications aux portes—Installations

01 Rideaux d'air
02 Barrières de quai
03 Rideaux en bandes
04 Autres
05 Améliorations

Air Economy Corp. 01
Alumicor Limited 04
Bally Refrigeration of Canada 01 03
Can-Am Air Leakage Control Systems 02
Canuck Garage Doors Co. 02 03
Coldmatic of Canada Ltd. 04
Custom Glass Ltd. 04
Drummond Metal Products Ltd. 04
Energy Control Centre 02 03 02
Energy Technology Products 01
Frommelt Industries, Inc. 03
J-Tak 01
Jacobs & Thompson Inc. 04
Kelley Company Inc. 02
Kingman Industries 03
Koolshade Corporation 02 03
Longhill Combustion Products Ltd. 01
Loren Cook Company 01
Miniveil Ltd. 01
Paterson Aire Systems 01
R.R. Entwistle Ltd. 01
RCR 04
Robert Soper 02 03 04
Schlegel Canada 04
Scyfrom Inc. 02 03 04
The King Co. 01 03
Withers Environmental 03

Systèmes de recouvrement

01 Nouveau recouvrement
02 Améliorations

Bally Refrigeration of Canada 01
Canadian General Electric Co. Ltd. 01 02
Canertech Inc. 02
Condecor Prod. Ltd. 01 02
Dow Corning Canada Inc. 01 02
Energy-Wise 2000 Inc. 01 02
Entech Inc. 01
Envirospec Inc. 01 02
Future Coatings, Inc. 01 02
Hanson Inc. 01 02
Insul-Glass Limited 01 02
Isometals Inc. 01
Marvel-Durofoam Limited 01 02
PPG Industries Canada 02
Pittsburgh Corning 01 02
Plasti-Fab Ltd. 01 02
Powsave Systems 02
Republic Powdered Metals 01 02
Stran Steel Building Systems 01 02
Tremco (Canada) 01 02
W.R. Grace & Co. of Canada Ltd. 01 02
Westeel Rosco 01 02

Systèmes de parois

01 Non structureux/intérieur
02 Structureux/extérieur

Bally Refrigeration of Canada 01 02
Canadian General Electric Co. Ltd. 01 02
Canertech Inc. 01
Coldmatic of Canada Ltd. 01
Coldstream Products of Canada Ltd. 01
Condecor Prod. Ltd. 01
Energy Control Centre 01
Energy-Wise 2000 Inc. 01 02
GTE Products Corp. 01 02
Hanson Inc. 01
Isometals Inc. 01 02
Plasti-Fab Ltd. 01 02
Stran Steel Building Systems 02
United McGill 02
W.R. Grace & Co. of Canada Ltd. 01
Westeel Rosco 02

Westinghouse Canada 01
Zero Energy Products 02

Modifications aux fenêtres—Installations

01 Pellicules
02 Accessoires isolants
03 Accessoires embreux
04 Autres
05 Améliorations
06 Vitres isolantes

Alcan Building Products 02
All Glass Inc. 02 03
Alumicor Limited 02 04
Appropriate Technology Corp. 02 03
B. Dumenil Enterprises Inc. 02
Campeau Corp. 02
Canadian General Electric 02 04
Canadian Glass Industries Ltd. 05
Canadian Great Energy Marketing 03
Chermacryl Plastics Limited 04
Clearview Insulating Glass 05
Custom Glass Ltd. 01 02
Deshwood Industries Ltd. 02
Doo-al Aluminum Windows 02 04
Drummond Metal Products Ltd. 01 02
Energy Control Centre 02
Energy Systems Company 01 02
Environmental Energies Inc. 03 04
Graham Products Limited 03
Hunter Enterprises Orillia Ltd. 02
Jacobs & Thompson Inc. 04
John C. Preston 02 03
Kaalshade Corporation 01 02 03
Lee Industries 02 03
Loewen Millwork 02
Modular Windows of Canada Limited 02
Multiver Ltde 02
N. Pollard & Son 02
N.A.P. Ltd. 02
Nu-Tech Glass Industries 02
Nu-Tech Mktg. Systems 02
OHM-Rite Electrical 02
P.H. Tech. Inc. 02 04
PPG Industries Canada 02
Paramount Glass & Millwork 02
RCR 02
Reple 02 03 04
Robert Hunt Corp. 02
Schlegel Canada 00
Solar Centre 02 03
Sun Ray Solar Systems 02
Superseal 01 02
Trans Canada Glass 02
Tremco (Canada) 02
Van Leer Plastics 01 02
Vitrerie Mont-Laurier 02
W.R. Grace & Co. of Canada Ltd. 02
Weecraft Manufacturing 02
3M Canada 01 02 03

Chapitre 2

Éclairage

Réduction de l'intensité lumineuse

Un des nombreux moyens avantageux d'améliorer l'efficacité de l'éclairage, est d'en évaluer les niveaux d'intensité. Au cours des dernières années, on a tendance à surévaluer l'intensité lumineuse requise et souvent, on fournit un éclairage trop intense pour un travail spécifique.

Mise en et hors circuit

La règle la plus élémentaire et la moins coûteuse est d'éteindre tout éclairage inutile. Ceci peut se faire manuellement, mais on ne peut s'y fier à moins de s'assurer que les usagers en soient bien informés. Il existe une gamme de *commandes* automatiques dont les *minuteries*, les *disjoncteurs à réenclenchement*, les *cellules photoélectriques* et les *commandes* synchronisées reliées à des *systèmes informatiques de contrôle de l'énergie*. Empiriquement, on devrait éteindre les lumières *incandescentes* si on en n'a pas besoin, les *fluorescents*, si la période d'inutilisation est d'au moins 15 minutes et les *lampes à décharge de grande intensité*, si la période d'inutilisation est d'au moins une heure. Parmi ces lampes à décharge de grande intensité, on retrouve les *halogènes* et les *lampes à vapeur de sodium, haute et basse pression*.

Élimination de l'éclairage inutile

Réduire le nombre d'appareils d'éclairage dans un endroit suréclairé en vaut la peine et les *tubes-résistances*, qui consomment un surcroît de courant d'environ 20%, peuvent être remplacés par des fluorescents et des lampes à décharge de grande intensité. Il existe aussi des *pseudo-tubes* pour les unités à deux tubes fluorescents. Le pseudo-tube n'émet aucune lumière et réduit de moitié la charge électrique.

On peut aussi considérer un *éclairage de travail ou dirigé* plutôt qu'un éclairage général lorsque les besoins varient grandement dans un édifice.

Sources efficaces d'éclairage

Parmi les types d'éclairages offerts sur le marché, les systèmes incandescents sont les moins efficaces, produisant la plus faible quantité de lumens par watt consommé. Les fluorescents sont trois fois plus efficaces que les lampes incandescentes, et les lampes halogènes, 1½ à 2 fois plus efficaces que les fluorescents (selon la dimension). Les lampes à vapeur de sodium, haute pression, sont de 1½ à 2½ fois plus efficaces que les fluorescents. Les lampes à vapeur de sodium, basse pression, sont plus efficaces si elles sont volumineuses; elles sont souvent utilisées à l'extérieur, comme éclairage de sécurité par exemple.

L'éclairage par lampes incandescentes devrait être réduit ou encore remplacé par des sources plus efficaces. Si un éclairage est utilisé pendant de longues heures, il pourrait être sage de remplacer un système à fluorescents par des lampes halogènes ou à vapeur de sodium, haute pression. Habituellement, les fluorescents de faible puissance s'avèrent un choix judicieux pour remplacer des fluorescents standard. Mise à part l'efficacité, l'amélioration de l'éclairage doit aussi tenir compte du coût des fixations et des lampes, de la durée de ces lampes et de l'entretien nécessaire.

Gradateurs

Des *gradateurs* pour les lampes de grande intensité peuvent s'avérer avantageux pour fournir une intensité adéquate avec un bon espacement entre

Chapitre 2

les lampes et aussi là où différents groupes nécessitant des éclairages différents se partagent les mêmes locaux. Les gradateurs peuvent être reliés à une commande par cellule photoélectrique, réduisant ainsi la consommation d'énergie tout au long de la durée de la lampe en compensant pour la diminution en lumen.

Les *fixations d'éclairage* les plus efficaces sont celles qui contrôlent et dirigent l'éclairage de façon à fournir le maximum de lumière utile pour une même quantité d'énergie. Des réflecteurs peuvent servir à concentrer la lumière là où on en a besoin; par exemple, sur les rayons d'articles dans les entrepôts et les salles de vente.

Les *lentilles* peuvent réduire l'efficacité d'une unité d'éclairage. Parmi les types qui offrent un contrôle des reflets, on retrouve les lentilles prismatiques et radiales.

Lentilles

En économisant l'énergie au niveau de l'éclairage, on doit considérer non seulement l'énergie et les charges d'apport en courant électrique, mais aussi l'énergie nécessaire à la climatisation des locaux.

Liste des produits

Tubes-résistances

01 Fluorescents
02 Décharge de grande intensité
03 Transistorisés

Appleton Electric Ltd. 02
Broen Ltd. 01
Canadian General Electric 01 02
Day-Ray Products Inc. 01
Duro-Test Electric Ltd. 01 02
Electric Power Accessories Co. Limited
Empire Controls 01 02 03
Guth Lighting 01 02
Holophane 02
Infranor Canada Inc. 02
Intralec 01 02
Lightlux Prod. Inc. 01 02 03
Lightolier Canada Inc. 01 02
Luxo Lamp Ltd. 01
National Electric 01 02 03
OHM-Rite Electrical 01 02
Peerless Electric 01
Philips Electronics 01 02
Phoenix Products Co. 02 03
Prelco Electronics Ltd. 03
Prodel 02
S.L. Watkins & Assoc. 01
Sarama Lighting 01
Suntrap Systems 02 03
Synerco Systems For Energy Conservation 01 03
Vallance Brown 01 02 03
Westinghouse Canada 01 02 03
Westron 02

Contrôles

01 Gradateurs
02 Microprocesseurs
03 Cellules photoélectriques
04 Disjoncteurs à réenclenchement
05 Minuteries

ADMIC Controls 01 02 03 04 05
ADT Energy Systems Ltd. 02
AMF/Paragon Electric Division 02 03 04 05
Allen-Bradley Canada Limited 05
Andover Controls Corp. 02
Automatic Controls Systems 01 02
Broan Ltd. 01
Canadian General Electric 02 03 05
Colorado Electro-optics Inc. 03
Conserval Engineering Inc. 01 03
Contric Automation Ltd. 02 05
Day-Ray Products Inc. 01
Durakool Inc. 05
E.A. Electric 01 02 03
Electric Power Accessories Co. Limited
Electromatic Components Ltd. 02 03 04 05
Empire Controls 01 02 03 04 05
Energy Management Corp. **02 03 04 05**
Energy Management Systems 01 02 03 04 05
Energy Systems Company 01 02 03 04 05
GTE Sylvania 03
Gen-Tec Inc. 02 05
Guth Lighting 03
H.O.P. Consulab Inc. 02
Hewlett Packard Canada Ltd. 02
Honeywell Ltd. 02 03
IDI Electric (Canada) Ltd. 01
Instrumentation & Control Systems Inc.
Instruments Champagne Int'l. 02 05
Intralec 02 03 04 05
Kalglo Electronics Co. Inc. **01 03**
Keene Lighting 03 05
Koolshade Corporation 02
Lightlux Prod. Inc. 01 03
M.H. Rhodes **05**
MTE 03 05
Mac Victor Mfg. 02 05
Margaux Controls Canada Inc. 02
Material Control, Inc. **02**
Moore Industries Inc. 02
National Electric 02 05
Opcon 03
Pass & Seymour Canada 01
Powsave Systems 02 04 05
Precision Multiple Controls 03 05
Prelco Electronics Ltd. 01 02 03 04 05
Promac Controls Inc. 05
R.R. Entwistle Ltd. 01 04 05
Suntrap Systems 01
Synerco Systems For Energy Conservation 01 03 05
Tecnecon Electronics Inc. 01
Telemecanique Canada 03
Texas Instruments 02
Timeco 05
Tork Canada 02 03 05
Trimax Controls 02 05
Vallance Brown 01 02 03 04 05
Veeder-Root of Canada 02 03 04 05
Waugh Controls 02
Westinghouse Canada 01 04 05
Wiremold Canada 02 05
Zenith Controls 05

Accessoires de distribution

01 Lentilles
02 Verres grossissants
03 Diffuseurs

Comeau Technique Ltd. 02
Corning Glass Works 01 02 03
Fostoria Industries, Inc. **01 02**
GTE Sylvania 01 02 03
General Scientific Equipment Co. **02**
Holophane 01 03
Merix Chemical Co. **01 03**
Peerless Electric 01

Chapitre 2

Luminaires et accessoires—par application

01 Éclairage par projecteurs
02 Endroits dangereux
03 Hall élevé
04 Autoroutes
05 Extérieur
06 Sécurité
07 Aires de travail

Appleton Electric Ltd. 01 02 03 05 06
Broan Ltd. 06
C & M Products Ltd. 02 03 05 06 07
Canadian General Electric 01 02 03 04 05 06 07
Dual-Lite Products Ltd. 06
Duro-Test Electric Ltd. 01 02 03 04 05 06 07
Electric Power Accessories Co. Limited 04 05
Fostoria Industries, Inc. **07**
GLE Inc. 02 06 07
GTE Products Corp. 01 02 03 04 05 06 07
GTE Sylvania 01 02 03 04 05 06
Guth Lighting 01 02 03 04 05 06 07
Holophane 01 02 03 04 05 06
Infranor Canada Inc. 01 04 05
Instruments Champagne Int'l. 06
Intralec 01 03 05
Keene Lighting 01 02 03 04 05 06 07
Lightlux Prod. Inc. 01 02 03 04 05
Lightolier Canada Inc. 01 05 07
Luxo Lamp Ltd. 07
National Electric 01 03
OHM-Rite Electrical 01 02 03 04 05 06 07
Philips Electronics 03 04 05 06
Phoenix Products Co. 01 02 05 06 07
Prodel 01 03 05
Prolight 03 06 07
Pyle-National of Canada 02 03
S.L. Watkins & Assoc. 05
Sarama Lighting **05 07**
Thorn Lighting 01 02 03 04 05 06 07
Vallance Brown 01 02 03 04 05 06 07
Westinghouse Canada 01 02 03 04 05 06 07
Westron 01 03 05 07
York Lighting 03 06 07

Luminaires et accessoires—par type

01 Fluorescents
02 Sodium, haute pression
03 Sodium, basse pression
04 Vapeurs de mercure
05 Halogènes

Appleton Electric Ltd. 01 02 04 05
Broan Ltd. 01
C & M Products Ltd. 01 02 03 04 05
Canadian General Electric 01 02 03 04 05
Day-Ray Products Inc. 01
Duro-Test Electric Ltd. 01 04 05
Electric Power Accessories Co. Limited 03 04 05
Fostoria Industries, Inc. **01 04**
GTE Products Corp. 01 04 05
GTE Sylvania 01 02 03 04 05
Guth Lighting 01 02 03 04 05
Holophane 01 02 04 05
Infranor Canada Inc. 02 03 04 05
Intralec 02 04 05
Keene Lighting 01 02 03 04 05
Lightlux Prod. Inc. 01 02 03 04 05
Lightolier Canada Inc. 01 02 04 05
Moldcast 02 04 05
OHM-Rite Electrical 01 02 03 04 05
Peerless Electric 01
Philips Electronics 01 02 03 04 05
Phoenix Products Co. 02 04 05
Prodel 02 03 04 05
Prolight 01 02 03 04 05
Pyle-National of Canada 02 04 05
S.L. Watkins & Assoc. 01
Sarama Lighting **01**
Thorn Lighting 01 02 03 04
Vallance Brown 01 02 03 04 05
Westinghouse Canada 01 02 03 04 05
Westron 04
York Lighting 01

Chapitre 3

Chauffage, aération et climatisation

Comme la majorité des édifices possèdent des systèmes de climatisation, ces derniers sont un des points essentiels à considérer pour les économies d'énergie. Dans le cas des industries, il est surprenant de réaliser que le système de climatisation ou de contrôle du milieu, en est [illegible] gé et peu compris et seule la production lui vole le premier rang.

Pertes ou gains de chaleur

De façon générale, les systèmes de climatisation servent à compenser les pertes ou les gains de chaleur, à contrôler la température et l'aération ambiantes, et parfois à contrôler le niveau d'humidité, assurant le confort des employés ou le bon fonctionnement de l'équipement.

Récupération de la chaleur

La récupération de la chaleur perdue par les systèmes d'échappement et en cours de traitement, devrait être considérée un moyen de réduire la consommation d'énergie et d'améliorer le milieu.

On devrait s'assurer que l'air d'échappement et l'aération suffisent au contrôle du confort, de la poussière, des odeurs et autres.

On devrait étudier le fonctionnement pendant les heures de travail et le rapport demande moyenne-demande maximale. Des clapets ou des verrouillages commandés par le procédé de traitement pourraient aider à réduire les quantités ou à maintenir le temps d'opération à une période optimale.

Abaissement de la température

Si des locaux ne sont pas occupés 24 heures par jour, sept jours par semaine, on peut abaisser la température pendant les heures d'inoccupation. Plus cette période est longue, plus on réalise d'économies; c'est donc là un point à ne pas négliger.

Épuration d'air

La qualité de l'air peut être maintenue sans décharger inutilement l'air chauffé vicié, en autant que l'échappement soit nettoyé et recyclé. Il existe divers appareils qui élimineront la fumée, les gaz, les odeurs et autres polluants puis retourneront l'air épuré au milieu. Il y a aussi les *dessicateurs*: ce sont des appareils spéciaux qui captent la chaleur de milieux très humides tels les piscines.

Climatisation

La consommation d'énergie d'un système de climatisation peut être réduite de plusieurs façons: unités à refroidisseurs ou de toit plus volumineuses et plus efficaces; réduction du fonctionnement de la pompe et du ventilateur grâce à des *systèmes à capacité (volume d'air) variable*; variation du régime des moteurs de refroidisseurs et des turbines d'admission des systèmes centrifuges; installation d'économiseurs qui mettent le refroidisseur, le compresseur et le condensateur hors circuit lorsque la température extérieure s'abaisse à un niveau prédéterminé.

Déstratification

Dans les édifices à plafonds élevés, il arrive qu'il y ait stratification par la chaleur, surtout dans les usines, les entrepôts et les arénas. Si, au cours de la

Chapitre 3

saison de chauffage, il y a une différence de 5°C à 7°C entre le niveau de travail et la toiture, il sera alors bon de considérer un *système de déstratification*. Si, dans un édifice, un problème d'aération est accompagné de stratification, il existe des appareils qui introduiront l'air frais extérieur au niveau de la toiture pour le mélanger à l'air chaud, résolvant ainsi les deux problèmes. Les ventilateurs à trois ou quatre pales, montés au plafond, poussant l'air vers le sol, sont les appareils de déstratification les plus courants.

Autres modes de chauffage

Là où il y a infiltration volumineuse d'air (service de réception/livraison, garages, etc), on pourra considérer un autre mode de chauffage tel un système *irradiant* ou *à infrarouge*. Les frais de chauffage pourront ainsi être réduits et le confort des employés, amélioré.

Les thermopompes

Les *thermopompes* se rencontrent dans les commerces et les institutions et sont capables de transmettre la chaleur très efficacement. Elles peuvent servir au chauffage comme au refroidissement. Les thermopompes industrielles captent l'énergie perdue de liquides telle l'eau chaude des condensateurs, des réservoirs de refroidissement, des refroidisseurs et des procédés de traitement.

Stockage thermique

Le *stockage thermique* représente une façon de répondre aux fluctuations dans la demande d'énergie. Il existe une gamme de modes de stockage thermique à faible volume dans des média tels l'eau, les fluides organiques, les sels minéraux, le sable et les tas de pierres.

Liste des produits

Pureté de l'air

01 Épuration
02 Dessication

AAF-Ltd. 01 02
Aston Industries Inc. 01 02
Blackhawk Industries Inc. 01 02
Blanchard-Ness Ltd. 02
CES-Conservation Energy Systems 02
Carrier Canada Limited 01 02
Centri-spray Corp. 01
Circul-Aire Inc. 01
Clawsey-Sohrt Mfg. Co. Ltd. 01
Combustion Research Corp. 01
Corning Glass Works 02
Electro-Air Canada 01
Ener-Corp Management Limited 01 02
Energy Farms Ltd. 01 02
Energy Technology Products 01
Extech Systems 01
Fabrication Z-Air Inc. 02
Gaylord Regethermic Canada Ltd. 01
Grepon Ltd. 01
Heat Extractor Corporation 01
Henlex 01
Honeywell Ltd. 02
ICG Manufacturing Ltd. 01 02
IDH Eng. Products Inc. 02
J-Tak 01
Kahn and Company 02
Kathabar Systems 02
L-K Metal Products Co. Ltd. 01 02
Lawson Taylor Inc. 01
Lennox Industries (Canada) Ltd. 01 02
Liebert Corporation 01 02
Liquiflame 01 02
Longhill Combustion Products Ltd. 01
Minivell Ltd. 01
Moldow Dust Control Sys. Ltd. 01
Niagara Blower 02
Northfab Systems (Canada) Ltd. 01
Paterson Aire Systems 01
Porritts & Spencer Filtration 01
Power Vac Services 01
Riverwood Enterprises & Mfg. 01
Temprite Ind. 01
United Air Specialists 01
Uraken Canada 02
Venmar 02
Vic Manufacturing 01
West Way 01

Refroidisseurs

01 Air
02 Combustible
03 Eau

AAF-Ltd. 01
Aerofin Corp. (Canada) Ltd. 01
Aerovent Inc. 01
Alfa-Laval Ltd. 02 03
Baltimore Aircoil of Canada 02 03
Basco Division 01 02 03
Blanchard-Ness Ltd. 01 02
C-E Canada 01
Canada Fans 01
Canadian Coleman Co. Ltd. 01
Ceilcote Canada 01
Coen Burners Canada Inc. 02 03
Darling Duro Ltd. 02 03
Duo-Matic Olsen Inc. 01 02
Energy Farms Ltd. 03 01
Energy Technology Products 01
Gas Energy Inc. 01
Grepon Ltd. 01
Honeywell Ltd. 01
Hunt & Moscrop (Canada) Inc. 01 02 03
ICG Manufacturing Ltd. 01
Ingersoll-Rand Canada Inc. 03
J.H. Lock and Sons Limited 01 02 03
Kathabar Systems 01
KeepRite Inc. 01 02 03
Liebert Corporation 01 03
Liquiflame 01
Longhill Combustion Products Ltd. 01
Muirhead Engineering Ltd. 03
Niagara Blower 01 02 03
The Arthur S. Leitch Company Ltd. 02
Vari-Cool/H&C 01
Vitter International 02 03
Young Radiator 02 03

Thermopompes

01 Air
02 Sol
03 Procédé industriel (température élevée incluse)
04 Eau

AAF-Ltd. 01 04
ASEA Ltd. 04
Airtechni Inc. 01 02 04
Baltimore Aircoil of Canada 03 04
Bard Manufacturing Co. 01 02 04
Berkeley Pump Ltd. 02 04
Canadian Coleman Co. Ltd. 01
Cantherm Heating Ltd. 02 03 04
Carrier Canada Limited 01 02 03 04
Clawsey-Sohrt Mfg. Co. Ltd. 01
Dean Products Inc. 03
Duo-Matic Olsen Inc. 01
En Mar Systems Ltd. 03
Energy Control Centre 01
Energy Farms Ltd. 01 04
Heat Pumps of Canada Limited 01 02 04
Hunter Enterprises Orillia Ltd. 02 04
ICG Manufacturing Ltd. 01
J-Tak 01 02 03 04

Chapitre 3

J.H. Lock and Sons Limited 01 02 03
04
KeepRite Inc. 01
Lennox Industries (Canada) Ltd. 01
Liquiflame 01 04
Mark Hot Inc. 04
Petro-Sun 02
Rai Products 02 04
Rheem Canada 01
Sihi Pumps 03
Solar Centre 01 02 03 04
Sunsau 02 04
Teledyne Laars Canada 04
Union Pump 03
Uraken Canada 01 03
Vic Manufacturing 01
Vitter International 03 04
West Way 01
Wylain Canada 04

Systèmes de chauffage très efficaces

01 Infrarouge
02 Irradiant

Aztec Canada Ltd. 01
Caframo Ltd. 02
Chromalox Canada 01 02
Combustion Research Corp. 01
Corning Glass Works 02
En Mar Systems Ltd. 01 02
Energy Control Centre 02
Enterprise Fdy. Co. Ltd. 02
Fostoria Industries, Inc. 01
Gen-Tec Inc. 02
Grepon Ltd. 01 02
H.O.P. Consulab Inc. 02
HCP Industrial Sales 01
Heating Alternatives Inc. 02
ICG Manufacturing Ltd. 01 02
Indusco Engineering 01
J-Tak 02
Kaiglo Electronics Co. Inc. 01 02
L-K Metal Products Co. Ltd. 01 02
Lakewood Stove Co. Ltd. 02
MacLeod & Grant Ltd. 02
Modine Manufacturing Co. 01 02
Panelbloc Corp. 01 02
Radiant Tube Systems 02
Rai Products 02
Robert Bell Ind. Ltd. 02
Schwark 01
Solar Centre 02
Therma-Ray Mfg. 02
Wylain Canada 02

Systèmes de chauffage très efficaces

(Le fournisseur indiquera le degré d'efficacité)

01 Hybrides
02 Autres
03 Fournaises électriques avec contrôle de la demande

Automation Industries (Can) Ltd. 02
BES Team Inc. 02
Centherm Heating Ltd. 02
Clawsey-Sohrt Mfg. Co. Ltd. 02
Danfoss Mfg. Co. Ltd. 02
Duo-Matic Olsen Inc. 02
Energy Farms Ltd. 01
Enterprise Fdy. Co. Ltd. 02
GTE Products Corp. 02
Grepon Ltd. 01
Heat-Trievar Systems 02
Heating Alternatives Inc. 02
Henlex 01
ITT Reznor 02
Kerr Controls Limited 02
Lakewood Stove Co. Ltd. 02
Liquiflame 01
Lisi Aero Guide Inc. 01
Longhill Combustion Products Ltd. 01
P.M. Wright 01
P.S.C. Controls 01
Petro-Sun 01 02
Plantguard Systems 00
Rai Products 02
Slant/Fin 01 02
Solar Centre 01
Solartech 02
Suntrap Systems 01
Thermolec 01
Thermolec Ltd. 01 03
Westcan Electrical Mfg. 02
Wylain Canada 02
Young Radiator 02
Z-Air Fabrication 02

Systèmes de stockage thermique

Acme Engineering Prod. Ltd.
Bally Refrigeration of Canada
Baltimore Aircoil of Canada
Clemmer Industries (1964) Limited
Condacor Prod. Ltd.
Energy Farms Ltd.
Environmental Energies Inc.
GSW Inc.
Henlex
John Wood
Petro-Sun
Solar Centre
Sun Ray Solar Systems
Therma-Ray Mfg.

Systèmes d'aération

01 Déstratification
02 Capacité variable
03 Autres
04 Ventilateur d'entre-toit
05 Systèmes de refroidissement par évaporation

AAF-Ltd. 02
American Coolair Corp 01 03
Broan Ltd. 03
Brook Crompton Parkinson Ltd. 01
CES-Conservation Energy Systems 03
Canada Fans 03
Canarm Ltd. 01 02 03
Carrier Canada Limited 02
Ceilcote Canada 03
Chicago Blower Canada Ltd. 03
Circul-Aire Inc. 01 02 03
Clawsey-Sohrt Mfg. Co. Ltd. 01
Conserval Engineering Inc. 01
Danhart Energy Systems Ltd. 01 02
En Mar Systems Ltd. 01
Energy Systems Company 01 03
Energy Technology Products 01 02
Enredco Canada Ltd. 01
Flakt Canada Ltd. 01
Garland Commmercial Ranges Limited 02 03
Graham Company 02
Grepon Ltd. 01 02
Hayes Dana 02
Heat-Trievar Systems 01
Henlex 01 03
Hoffman Engineering Company 02
J-Tak 02
Leader Fan Ind. Ltd. 01 02 03
Lisi Aero Guide Inc. 01 02 03
Longhill Combustion Products Ltd. 01
Loren Cook Company 01 02 03
Minivoil Ltd. 01
Mitco Corporation 02 03
NovaVent North America 02 03
P.M. Wright 01 03
Penn Ventilator Can. 03
Plantguard Systems 00
Porritts & Spencer Filtration 03
Reliance Electric 02
Riverwood Enterprises & Mfg. 01
Solarsystems Industries 03
Spraycool 04
Synerco Systems For Energy Conservation 01
Taco (Canada) 03
Temprite Ind. 01
United McGill 03
Vallance Brown 01
Venair 01
Venmar 01
Vic Manufacturing 03
Wallace Ventilating Equip Co. 01 02 03
Wilcorp Mfg. 01
Wing Co. 01
Woods Fans 03

Chapitre 4

Échange et récupération de la chaleur

Utilisation de la chaleur récupérée

Des dispositifs de récupération de chaleur sont offerts pour la majorité des systèmes de climatisation et la plupart des procédés industriels. La chaleur ainsi récupérée *doit* cependant pouvoir être utilisée pour justifier le bien fondé économique de tels apports aux systèmes. Il s'agit donc, en premier lieu, d'établir si la chaleur récupérée peut être ramenée au système ou procédé d'origine; de tels systèmes sont habituellement plus simples à contrôler et moins chers à installer.

Considérant tous les types de dispositifs de récupération de chaleur, l'aspect le plus important est de s'assurer que le mode de transmission de la chaleur soit continu et efficace, et que l'entretien soit minimal. Le délai réel de récupération de l'investissement initial pourra être prolongé considérablement si la performance du système est réduite par des surfaces de transmission encrassées.

Systèmes de récupération air-air

Les systèmes de récupération air-air offrent la plus grande variété d'applications sur une plage variée de températures. Pour ne citer que quelques exemples types, on retrouve, dans le secteur industriel, la récupération des gaz d'échappement de fournaises, de fours et de chaudières; et dans les secteurs commercial et institutionnel, il y a les échappements de cuisines, de blanchisseries et de restaurants. Dans les édifices où, pour des raisons d'hygiène et de sécurité, des niveaux élevés d'aération sont nécessaires, la chaleur récupérée sert alors à réchauffer l'air frais provenant de l'extérieur.

Voici quelques exemples de systèmes de récupération air-air:

- *Échangeurs à plaques (lames et plaques-ailettes)*
- *Turbines rotatives de chauffage*
- *Systèmes de distribution par boucles*
- *Caloducs*
- *Récupérateurs*

Il existe aussi d'autres systèmes pour des applications particulières tels des échangeurs de chaleur par thermosiphon, des serpentins à ailettes, des systèmes à tours multiples et des refroidisseurs à air sec par évaporation.

Dans le cas de réadaptations générales, et surtout là où la chaleur récupérée sera utilisée à un point autre que celui de pénétration d'air ou encore dans le cas de systèmes à points d'échappements et d'utilisations multiples, le système de distribution par boucles offre de nombreux avantages.

Bien que le niveau d'efficacité de récupération de ce système soit généralement

faible, il élimine la nécessité d'une double tubulure d'admission à une unité commune.

Les *échangeurs à plaques* offrent un niveau d'efficacité assez élevé avec une faible chance de pollution interne. Les *turbines rotatives de chauffage* sont très efficaces; il est facile d'en contrôler le débit et elles peuvent être équipées d'un dispositif de récupération d'humidité. Elles présentent néanmoins un certain niveau de pollution interne. Les *caloducs* sont très efficaces. Ils offrent, si nécessaire, un contrôle précis de la température; ils n'ont aucune pièce mobile, et ne présentent aucune pollution interne. Les caloducs sont cependant plus chers et leur efficacité est réduite lorsque l'extrémité de décharge du système s'encrasse.

Air de combustion préchauffé

Un récupérateur transmet la chaleur de l'échappement d'une fournaise au point d'alimentation en air de combustion. Ce système est habituellement moins efficace que les autres, mais il peut supporter les températures très élevées évacuées par les fournaises. Si on utilise ce système, il faut tenir compte de la richesse du mélange, car en étant préchauffé, l'air de combustion est d'une densité très différente. Le calcul volumétrique de l'air doit alors se faire avant le point de préchauffage sinon il faut s'assurer de compenser pour la différence de densité.

Une augmentation marquée de la température de l'air de combustion nécessitera invariablement l'installation de brûleurs spéciaux.

Échangeurs liquide-liquide, air-liquide, liquide-air

Les *échangeurs à calandre* ou à ailettes pour la *transmission liquide-liquide de la chaleur* valent la peine d'être considérés comme système de récupération de la chaleur dans les usines où les circuits de liquides résiduels transmettent de la chaleur utilisable. Si l'eau ou tout autre liquide doit être préalablement chauffé, les épargnes réalisées par l'utilisation d'un système de récupération de chaleur pourront être justifiées. Parmi d'autres types de systèmes, on peut citer l'échangeur à double tube.

Pompes à chaleur industrielles

Les *pompes à chaleur industrielles* ne sont pas tellement utilisées de nos jours, mais si la tendance actuelle à comparer les coûts des combustibles fossiles et de l'électricité continue, ce type d'équipement deviendra de plus en plus viable. On verra de nombreuses applications pour un système permettant la récupération de la chaleur d'un circuit résiduel à basse température pour l'utiliser à des températures plus élevées.

Liste des produits

Systèmes d'échange et de récupération de la chaleur—par source de chaleur

01 Air
02 Gaz de combustion
03 Vapeur
04 Eau
05 Autres liquides

AAF-Ltd. 01
ACS-Hovac 01
Acme Engineering Prod. Ltd. 01 02 03 04 05
Aerofin Corp. (Canada) Ltd. 02 03 04 05
Aerovent Inc. 01
Alfa-Laval Ltd. 03 04
American Standard 01 03 04 05
Aston Industries Inc. 01 03 04
Atlas Polar Company Limited 03 04
B.E.S. Energy Equipment 01 03 04
Baltimore Aircoil of Canada 04 05
Bard Manufacturing Co. 01 04
Berkeley Pump Ltd. 04
Bigelow-Liptak of Canada Ltd. 05
Biraghi Entrepose 02 03 04
Blackhawk Industries Inc. 01
Blanchard-Ness Ltd. 01
Blenkhorn & Sawle Limited 01 02
Braslove Separator Co. 01 02
Brunette Machine Works Ltd. 01 03
CES-Conservation Energy Systems 01
Cambridge Filter Corp. 01
Can-Eng Sales 02
Canada Fans 01 02
Canadian Boilers Ltd. 01 02 03 04 05
Canadian Schack Ltd. 01 02
Cantherm Heating Ltd. 04
Carbone Lorraine Corp. 02 05
Carrier Canada Limited 04 05
Catalytic Damper Co. Ltd. 02
Celcote Canada 01 02
Chromalox Canada 01
Circul-Aire Inc. 01
Coen Burners Canada Inc. 01 02 03 04 05
Combustion Research Corp. 01
Danhart Energy Systems Ltd. 01 09
Darling Duro Ltd. 03 04 05

Chapitre 4

Dean Products Inc. 01 02 03 04
Deltak Corporation 02 03
En Mar Systems Ltd. 01
Ener-Corp Management Limited 01
Energy Farms Ltd. 01 02
Energy Technology Products 01 02
Enterprise Fdy. Co. Ltd. 01
Environmental Energies Inc. 01 04
ESD Industries Inc. 04 05
FTS Systems, Inc. 04
Fabrication Z-Air Inc. 01
Farrier Inc. 01 02
Flakt Canada Ltd. 01
Fromson Heat Transfer Ltd. 01 02 03 04 05
GSW Inc. 04
Garland Commmercial Ranges Limited 01
Gas Energy Inc. 02 04
Gaylord Regethermic Canada Ltd. 01 04
Grepon Ltd. 01
Guaranty Performance Co. Inc. 02
Heat Extractor Corporation 02
Henlex 01 02 04 05
Henry Vogt Machine 03
Hick Hargreaves and Co. Ltd. 03
Hirt Combustion Engineers 01 02 03
Honeywell Braukmann Inc. 03 04 05
Hunt & Moscrop (Canada) Inc. 01 02 03 04 05
Hunter Enterprises Orillia Ltd. 02
ICG Manufacturing Ltd. 02
IDH Eng. Products Inc. 01
ITT Fluid Products Canada 01 02 03 04 05
ITT Reznor 01
Inproheat Industries Inc. 01 02 03 04 05
Indusco Engineering 01 02
Industronics Inc. 02
Ingersoll-Rand Canada Inc. 02
J-Tak 01 02
J.H. Lock and Sons Limited 01 02 03 04 05
John Wood 03 04
Johnson Paterson Ltd. 02 03
Kerdon Mfg. Ltd. 01
Kathabar Systems 01 02
KeepRite Inc. 01 02 03 04 05
L-K Metal Products Co. Ltd. 01 02
Liebert Corporation 01
Lisi Aero Guide Inc. 01
Longhill Combustion Products Ltd. 01 02 04
Loren Cook Company 01
MacLeod & Grant Ltd. 01 04
Makinson Winchester Inc. 03 04 05
Midland Ross of Canada 01 02 03 04 05
Miniveil Ltd. 01
Mitsubishi Electric 01
Muirhead Engineering Ltd. 04 05
Niagara Blower 04
Nixon Plate Coils 03 04 05
North American Mfg. Co. 02
Olivine Corp. 02 03 04 05
Ontor 01
Ordan Thermal Products 01 02 05
P.M. Wright 01
Paterson Aire Systems 01 02 04
Paul Mueller 02 04 05
Petro-Sun 02 04 05
Plantguard Systems 03 04 02
Porritts & Spencer Filtration 01 02
Proenco Systems 01 02 03 04
Pumps & Softeners 03 04 05
Richard W. Watt & Associates 01 03
Riley-Beaird 01
Riverwood Enterprises & Mfg. 01
Robert Bell Ind. Ltd. 01 02
Robert Mitchell 01 02 03 04 05
Roth Pump 03 04
Scarborough & Grant 01 02
Sentry Equipment 04
Slant/Fin 03 04
Solar Centre 04
Solartech 05
Stickle Steam Spec. Co. 04
Sugar Hut Hill Holdings 01 02
Suntrap Systems 01 04
Synerco Systems For Energy Conservation 02
Taco (Canada) 03 04 05
Temprite Ind. 01 02
The Air Changer Company Ltd. 01
The Arthur S. Leitch Company Ltd. 03 04
The G & S Mill, Inc. 01
Toronto Coppersmithing Int'l. 02 03 04 05
Tranter Canada 02 04 05
Trecan 01 02
United Air Specialists 01 04 05
Utility & Industrial Supply 01 02 03 04 05
Vitter International 04 05 06
Water Refining 04
Westinghouse Canada 03
William G. Montgomery Ltd. 04 05
Wing Co. 01
York Shipley 01 02
Young Radiator 01 03 04
Z-Air Fabrication 01 02 04 05
Zedex Products 04
Zero Energy Products 01 04
Zimpro Hydro Clear 04 05

Systèmes d'échange et de récupération de la chaleur

01 Par conduit
02 Boucle glycol
03 Ailettes
04 Régénération
05 Rotatifs
06 Calandre et tube
07 Plaques spirales
08 Tube allongé
09 Tube de vitre

AAF-Ltd. 02
ACS-Hovac 01 03
Acme Engineering Prod. Ltd. 01 03 06
Aerofin Corp. (Canada) Ltd. 02
Alfa-Laval Ltd. 02 03 04 07
American Standard 03 06
Aston Industries Inc. 01
Atlas Polar Company Limited 04 06
B.E.S. Energy Equipment 01 06
Baltimore Aircoil of Canada 03
Basco Division 06
Bigelow-Liptak of Canada Ltd. 01 06
Biraghi Entrepose 01 08
Blanchard-Ness Ltd. 02
Blenkhorn & Sawle Limited 02 03 06
Brunette Machine Works Ltd. 02
C-E Canada 06
CES-Conservation Energy Systems 01 03
Canadian Schack Ltd. 01 06
Cantherm Heating Ltd. 02 04
Carbone Lorraine Corp. 06
Carrier Canada Limited 06
Chromalox Canada 01
Circul-Aire Inc. 01 02 05
Coen Burners Canada Inc. 01 06
Combustion Research Corp. 04
Corning Glass Works 05
Curwen & Newbery Ltd. 02 03 04 05 06
Danhart Energy Systems Ltd. 01 05 06
Darling Duro Ltd. 06
Dean Products Inc. 03
En Mar Systems Ltd. 07
Ener-Corp Management Limited 03
Energy Technology Products 01 02 05 06
Enterprise Fdy. Co. Ltd. 01
ESD Industries Inc. 06
Fabrication Z-Air Inc. 03
Farrier Inc. 02 04 06
Flakt Canada Ltd. 03 05
Fromson Heat Transfer Ltd. 06
Garland Commmercial Ranges Limited 01
Gaylord Regethermic Canada Ltd. 01 02
Grepon Ltd. 03
Heat Extractor Corporation 01
Henlex 02 03 05
Hick Hargreaves and Co. Ltd. 06
Hirt Combustion Engineers 05 06
Honeywell Braukmann Inc. 02
Hunt & Moscrop (Canada) Inc. 02
Hunter Enterprises Orillia Ltd. 01
IDH Eng. Products Inc. 03 05
ITT Fluid Products Canada 02 06
Inproheat Industries Inc. 01 06 07
Indusco Engineering 03 06
Ingersoll-Rand Canada Inc. 05
J-Tak 01 05
J.H. Lock and Sons Limited 02 06
Johnson Paterson Ltd. 06
Kerdon Mfg. Ltd. 01 03 04 05 06
Kathabar Systems 01 02
KeepRite Inc. 02 06
Lawson Taylor Inc. 05
Liebert Corporation 02
Longhill Combustion Products Ltd. 01 02 03 04 05
Loren Cook Company 01
MacLeod & Grant Ltd. 01 03 05 06
Makinson Winchester Inc. 03 06
Mark Hot Inc. 02
Midland Ross of Canada 01 02 03 04 06
Miniveil Ltd. 05
Muirhead Engineering Ltd. 02 03 06
Niagara Blower 05 01
Nixon Plate Coils 02 03
North American Mfg. Co. 06
Olivine Corp. 04
Ordan Thermal Products 01 03 05 06
P.M. Wright 05
Paterson Aire Systems 05 06
Patterson-Kelley 03 06
Paul Mueller 03
Petro-Sun 02 03 06
Plantguard Systems 06
Proenco Systems 01 03
Pumps & Softeners 06
Richard W. Watt & Associates 05 06
Riley-Beaird 06
Riverwood Enterprises & Mfg. 01
Robert Mitchell 02 06
Scarborough & Grant 04 06
Sentry Equipment 06
Sugar Hut Hill Holdings 01 04 06
Sunsau 02
Synerco Systems For Energy Conservation 07
Taco (Canada) 06
Temprite Ind. 02 03 05
The Arthur S. Leitch Company Ltd. 06
Toronto Coppersmithing Int'l. 06 07
Tranter Canada 01 03
Trecan 01 03 04 06
United Air Specialists 03 06
United McGill 01
Utility & Industrial Supply 01 03
William G. Montgomery Ltd. 06 07
Wing Co. 05
York Shipley 06
Young Radiator 02 06
Z-Air Fabrication 01 03
Zedex Products 02 06
Zero Energy Products 01
Zimpro Hydro Clear 06

Chapitre 5

Isolation thermique

Perte de chaleur/ gain de chaleur

Un isolant sert à éviter les pertes ou les gains de chaleur, soit, garder à l'intérieur la chaleur voulue et à l'extérieur la chaleur indésirée. Sa valeur principale se traduit par une économie des coûts de chauffage, mais il présente aussi d'autres avantages dont le contrôle précis de la température des procédés et la protection des employés.

Condensation

L'isolant permet aussi d'empêcher la condensation sur les surfaces des équipements recouverts, évitant ainsi leur avarie par corrosion ou les effets nocifs de la condensation aux aires de travail.

Suivent les principaux points à surveiller lorsqu'on isole pour la première fois ou qu'on désire améliorer l'isolation existante: la possibilité que l'isolation d'origine ait été mal conçue; le mauvais entretien depuis l'installation d'origine; et l'inadéquation suite à la hausse des coûts du chauffage depuis que les décisions d'installation ont été prises.

Épaisseur avantageuse

L'analyse la plus importante est l'évaluation de l'épaisseur la plus avantageuse. Comme c'est le cas dans la plupart des décisions techniques, il s'agit d'un compromis entre les frais d'installation et d'entretien, et les économies d'énergie à réaliser. Les analyses informatiques du problème offertes par les diverses associations professionnelles et les experts-conseils en énergie peuvent servir à l'étude des points suivants: surfaces exposées à température élevée—tuyauteries, réservoirs, chaudières et équipement; modification pour des températures plus élevées—tuyauteries, réservoirs, chaudières et équipement; et, circuits à froid.

En étudiant les divers systèmes d'isolation, la première étape à réaliser, évidemment, est l'élimination de toute surface exposée et de fournir un niveau d'isolation optimal. Il s'avère aussi avantageux, parfois, de refaire une étude du système de chauffage pour chercher à en améliorer l'efficacité.

Choix des matériaux

On devrait réviser le choix de matériau isolant afin de s'assurer que les matériaux en place et à ajouter sont les plus efficaces. Cette étude devrait inclure la compatibilité au milieu de travail ou au procédé, *les variations de température*, les restrictions physiques et l'exposition à l'humidité.

Parmi les matériaux isolants courants on retrouve: la fibre minérale, sous forme de revêtement de tuyau, en vrac, bloc ou couverture; la fibre de verre, sous forme de revêtement de tuyau, en panneau, couverture et en vrac, dans une grande plage de densités; la fibre céramique, surtout utilisée pour des conditions de températures élevées dont les fournaises; le silicate de calcium, sous forme de revêtement de tuyau et en bloc; et les matériaux isolants en plastique cellulaire dont *l'uréthane, l'isocyanidate* et les *résines phénoliques*.

Coupe-vapeur

L'exposition à l'humidité est probablement le facteur le plus souvent oublié lors du choix ou de la réparation de l'isolation. Afin de bien comprendre l'importance de ce facteur, il est bon de noter qu'un isolant saturé d'eau transmet la chaleur environ quinze à vingt fois plus rapidement qu'un isolant sec, et qu'un isolant saturé de glace la transmet environ cinquante fois plus rapidement. Ces

Chapitre 5

facteurs relatifs renforcent bien l'idée que l'installation et le bon entretien des coupe-vapeur sont très importants et que, à un degré moindre, le choix de coupe-vapeur appropriés et leur entretien sont aussi importants que le choix de l'épaisseur et du type appropriés d'isolant.

Enveloppe de l'édifice

Améliorer l'isolation de l'enveloppe d'un édifice sera plus économique si l'opération se fait en même temps que des réparations majeures. Pour ce qui est des plafonds suspendus, des combles brisés ou autres cas semblables, il est facile d'ajouter une isolation supplémentaire. Divers types d'isolants de toiture peuvent être posés entre l'ancien isolant et la toiture rénovée; et des panneaux de polystyrène étanches aux intempéries peuvent être montés sur les murs intérieurs ou extérieurs.

Une étude de l'isolation devrait donc considérer une liste détaillée des vérifications d'entretien qui permettront d'évaluer les conditions existantes, un rapport sur les épaisseurs avantageuses d'isolants, et les coûts de l'amélioration de l'isolation, compte tenu des coûts futurs en énergie, sans oublier une étude des types d'isolants utilisés.

Liste des produits

Isolation thermique—par application

01 Enveloppe de l'édifice
02 Chaudières
03 Tuyauterie
04 Réservoirs et autoclaves
05 Autres
06 Couvertures à température élevée
07 Fournaises

Abisko Mfg. Inc. 03 04
Accessible Products Company 03 04 05
Airtechni Inc. 01 03 04 05
Albion 03
Babcock & Wilcox Refractories 02 04
Bally Refrigeration of Canada 01
Bigelow-Liptak of Canada Ltd. 02 04
Can-Am Air Leakage Control Systems 01
Can-Eng Sales 06
Canadian General Electric Co. Ltd. 03 04
Canertech Inc. 01 02 03 04
Carborundum Resistant 02 03 06
Coldmatic of Canada Ltd. 01
Condecor Prod. Ltd. 01 05
Corning Glass Works 02 03
Custom Glass Ltd. 01
Dow Chemical Canada Inc. 01
Dow Corning Canada Inc. 04
Energy-Wise 2000 Inc. 01 05
Entech Inc. 03 04
Fattal Thermocanvas 02 03 04
Fiberglas Canada Inc. 01 02 03 04
Futura Coatings, Inc. 01 04
Hanson Inc. 01
Improheat Industries Inc. 04 05
Inservac Limited 03 04
Insul-Coustic Inc. 01 02 03 04 05
Insul-Glass Limited 01 02 03 04
John C. Preston 01
KSM Canada Ltd. 01 02 04
Kerr Controls Limited 01
Liquiflame 01
Markel Corporation 05
Morval-Durofoam Limited 01
National Cellulose Corporation 05
Nu-Tech Mktg. Systems 05
Ordan Thermal Products 02 04 05
Pittsburgh Corning 01 03 04
Plasti-Fab Ltd. 01 03 04
Shaw Industries Ltd. 03
Solar Centre 03
Superseal 01
Toronto Coppersmithing Int'l. 04
W.S. Libbey Company 02 03 04 05
Westroc Industries 01
Zero Energy Products 01
3M Canada 03

Isolation thermique—par matériau

01 Silice de calcium
02 Verre cellulaire
03 Fibre céramique
04 Silice à diatomées
05 Carton-fibre
06 Fibre de verre
07 Carbonate de magnésium
08 Perlite
09 Mousse phénolique
10 Polystyrène
11 Polyuréthane/polyisocyanure
12 Feuille de métal réfléchissante
13 Laine minérale
14 Vermiculite
15 Trousses d'isolation à la mousse

Abisko Mfg. Inc. 11 15
Accessible Products Company 03 06 11 15
Acwil Insulations Limited 01 06 13 04
Albion 03 05 06 05
Babcock & Wilcox Refractories 03
Bally Refrigeration of Canada 11
Can-Am Air Leakage Control Systems 11 15
Can-Eng Sales 03
Canadian General Electric Co. Ltd. 11
Canertech Inc. 13
Carborundum Resistant 03 06
Coldmatic of Canada Ltd. 11
Condecor Prod. Ltd. 11
Corning Glass Works 02
Dow Chemical Canada Inc. 10
Energy Control Centre 06 13 15
Energy-Wise 2000 Inc. 11
Entech Inc. 11 15
Fiberglas Canada Inc. 01 06
Futura Coatings, Inc. 11
GTE Products Corp. 03
Graham Fiber Glass Limited 06
Hanson Inc. 11
Heat Extractor Corporation 06
Heat Seal Equipment 06 13
Holmes Insulations Inc. 03 04 06 08 13 14
I.F. Industries Inc. 11 13 15
Inservac Limited 01 06 11
Insul-Coustic Inc. 01 02 03 06 13
Insul-Glass Limited 01 04 06 09 15
Kerr Controls Limited 05
Liquiflame 13
Morval-Durofoam Limited 10 11
Ordan Thermal Products 03 05 06
Pittsburgh Corning 02 06
Plasti-Fab Ltd. 10 15
Plibrico (Canada) 03
Shaw Industries Ltd. 01 08 11
Solar Centre 06 10 11 15
Superseal 11 12
Tapecoat of Canada 11 15
W.S. Libbey Company 16
Westroc Industries 11 12
3M Canada 03 12

Isolation thermique—par plage de température

01 Basse température (−100°C à 100°C)
02 Température moyenne (100°C à 230°C)
03 Température très élevée (230°C à 540°C)
04 Température très élevée (540°C à 870°C)
05 Isolant réfractaire (Plus de 870°C)

Accessible Products Company 01 05
Albion 02 03 04
Babcock & Wilcox Refractories 03 04 05
Bally Refrigeration of Canada 01
Bigelow-Liptak of Canada Ltd. 05
Can-Am Air Leakage Control Systems 01 02

Chapitre 5

Can-Eng Sales 05
Canertech Inc. 04
Carborundum Resistant 02 03 04 05
Coldmatic of Canada Ltd. 01
Condecor Prod. Ltd. 01 02
Corning Glass Works 04 05
Dow Chemical Canada Inc. 01
Energy-Wise 2000 Inc. 01 02
Entech Inc. 01
Fiberglas Canada Inc. 01 02 03
Futura Coatings, Inc. 01 02
Hanson Inc. 01 02
Heat Extractor Corporation 02 03
Heat Seal Equipment 01
Holmes Insulations Inc. 01 02 03 04 05
Inproheat Industries Inc. 02 03 04 05
Inservac Limited 01 02 03 04
Insul-Coustic Inc. 01 02 03 04 05
Insul-Glass Limited 01
Kerr Controls Limited 01
Liquiflame 01
Markel Corporation 01 02
Morval-Durofoam Limited 01
Nu-Tech Mktg. Systems 01
Ordan Thermal Products 04 05
Ordan Thermal Products 05
Pittsburgh Corning 01 02 03
Plasti-Fab Ltd. 01
Plibrico (Canada) 05
Riverwood Enterprises & Mfg. 01
Scarborough & Grant 05
Shaw Industries Ltd. 01 02
Solar Centre 01 02
Superseal 01
Tapecoat of Canada 02
W.S. Libbey Company 02
Westroc Industries 01
Zedex Products 01 02

Chapitre 6

Combustion

Les combustibles

Les systèmes brûlant des combustibles fossiles offrent les meilleures possibilités d'économie d'énergie, au niveau même de la combustion.

Les combustibles à teneur plus élevée en carbone qu'en hydrogène (ex.: combustibles pour soutes) ont moins de pertes à la cheminée que les combustibles à base d'hydrogène (ex.: gaz naturel), car la vapeur d'eau formée par la combustion du gaz est perdue avec sa chaleur latente. De même, il y a pertes d'énergie causées par l'humidité du combustible et l'air de combustion; ces pertes, cependant, sont pratiquement incontrôlables.

La seule humidité qui puisse vraiment se contrôler est celle qui se trouve dans le combustible, et ceci s'applique principalement aux systèmes de chauffage au charbon.

Réduire l'excès d'air

La température des gaz en cheminée et l'excès d'air sont les deux points où l'on peut réduire les pertes. Pour une combustion complète et une bonne flamme, chaque *brûleur* et système de contrôle nécessite une certaine quantité d'excès d'air. Cet excès peut être maintenu à un minimum, ou amélioré, en faisant une *analyse des gaz en carneau*, ce qui permettra de réduire les pertes de gaz secs à ce niveau. Mis à part le réglage des contrôles existants, on devrait étudier les économies qui pourraient être réalisées en remplaçant le système de contrôle, voir même les brûleurs, pour réduire le volume d'excès d'air.

Les brûleurs

Les brûleurs choisis devraient présenter une souplesse d'opération, dans le choix de combustible et de débit moyen par exemple, tout en offrant un niveau élevé de combustion et peu de gaz d'échappement. Parmi les brûleurs *à faible excès d'air*, on retrouve les *brûleurs axiaux* qui réduisent au minimum l'excès d'oxygène.

Contrôle et analyse

Un *contrôle adéquat de la combustion* est essentiel si on veut tenir au minimum les pertes en combustible non-brûlé. Ceci peut se produire avec le charbon et le mazout, et à un certain point avec la combustion du gaz. Tenter de réduire l'excès d'air simplement par des systèmes de contrôle opérant par *analyse d'oxygène* dans les gaz de carneau pourrait résulter en la production de combustible non-brûlé et de fumée. L'analyse des gaz en carneau devrait donc inclure un dosage des combustibles.

Récupération de la chaleur

La *récupération de la chaleur produite par la combustion* représente une forme intéressante d'économie d'énergie, en autant qu'existe une possibilité d'utilisation de cette chaleur. Le retour de la chaleur au procédé d'origine ou associé offre habituellement les plus grandes économies. S'il n'existe aucune possibilité de ce genre, on peut alors considérer utiliser la chaleur pour chauffer l'édifice, bien que ceci ne puisse se faire qu'au cours des saisons froides et que le contrôle peut en être dispendieux.

Les chaudières

Il existe plusieurs types de contrôles de chaudières, certains *opérés par microprocesseur* et offrant un réglage très précis de la richesse du mélange. Parmi les dispositifs d'amélioration on retrouve des *turbosoufflantes* qui s'adaptent aux tubes bouilleurs, faisant circuler l'air de façon à transmettre plus de chaleur vers l'eau de la chaudière plutôt qu'à la cheminée.

Chapitre 6

Dans le cas des chaudières, les pertes de chaleur se retrouvent principalement au niveau des surfaces de transmission de chaleur. L'entartrage des tubes de four, les dépôts calcaires dans le réservoir, les chicanes endommagées et les accumulations de suie sur les sections de conduction contribuent tous à ces pertes. Contrôler ces conditions implique le *nettoyage de la chaudière* et l'emploi *d'équipement du purge, d'additifs* et *d'adoucisseurs de l'eau d'alimentation*.

La chaudière doit être considérée comme une entité qui inclut l'alimentation en combustible, le système de contrôle de la combustion, le traitement et le chauffage de l'eau d'alimentation, la désaération, la purge et le *renvoi des condensats*.

Liste des produits

Équipement de nettoyage et de purge de chaudières

01 Systèmes automatiques
02 Systèmes manuels

Canadian Boilers Ltd. 01
Copes-Vulcan Div. 01 02
Diamond Canapower 01 02
Foxboro Canada Inc. 01
Lisle-Metrix Ltd. 01
Maxon Corporation 01 02
Metex Corporation Ltd. 01
Metropolitan Refining Co. Inc. **01 02**
Ordan Thermal Products 01
Perolin-Bird Archer 01
Petro-Sun 01
Plantguard Systems 01
Raypak Thermonics (Canada) 01
Robert Bell Ind. Ltd. 02
Sentry Equipment 01
Specialty Chemicals 01
The Arthur S. Leitch Company Ltd. 01 02

Chaudières

01 Conventionnelles, très efficaces
02 Modifications visant à améliorer l'efficacité
03 Récupération de la chaleur perdue

Ainsworth Electric 01
Automation Industries (Can) Ltd. 01
BES Team Inc. **01**
Bigelow-Liptak of Canada Ltd. 03
Biraghi Entrepose 02 03
Blenkhorn & Sawle Limited 03
Brunette Machine Works Ltd. 03
C-E Canada 01 02 03
Canadian Boilers Ltd. 01 02 03
Canadian Schack Ltd. 01 03
Chromalox Canada 01
Circul-Aire Inc. 03
Clayton Industries 01 03
Conamara Limited 01 02
Conserval Engineering Inc. 02
Curwen & Newbery Ltd. **03**
ESD Industries Inc. 03
Farrier Inc. **03**
Foster Wheeler Limited 01 02 03
Fulton Boiler Works, Inc. 01
Gas Energy Inc. **01 03**
Gotaverken Energy Systems 01 02
Henlex 01 03
Henry Vogt Machine 03
Hirt Combustion Engineers 03
ICG Canadian Propane Ltd. 02
Industronics Inc. **03**
Inproheat Industries 02 03
Kerr Controls Limited 01
Konus Systems Inc. 03
L-K Metal Products Co. Ltd. 01
MacLeod & Grant Ltd. 03
Martin Oakwood Ltd. 01 03
Moldow Dust Control Sys. Ltd. 01
Mottpac Boilers Inc. 01
Nationwide Boiler Inc. **01**
North American Mfg. Co. **03**
Olivine Corp. **03**
Ontor 02
Ordan Thermal Products 02 03
Paterson Aire Systems 03
Patterson-Kelley 01
Peabody Engineering 02
Pendell Boiler 01 02
Petro-Sun 01 02 03
Plantguard Systems 03
Rai Products 01
Ray Burner **01 02**
Rheem Canada 01
Riley-Beaird 03
Robert Bell Ind. Ltd. 01 03
Schwark 01
Slant/Fin 01 02
Solid Waste Management 03
Tervcon 02
Utica Steam Engine & Boiler Works **03**
Vapor Canada 01 03
Volcano 01 02 03
Water Refining 02
Weiss Usa **01**
Wilgood **02 03**
Willer Engineering 02
Wylain Canada 01
York Shipley 01 03

Économiseurs pour la récupération de la chaleur

Aerofin Corp. (Canada) Ltd.
Bigelow-Liptak of Canada Ltd.
Biraghi Entrepose
Canadian Boilers Ltd.
Circul-Aire Inc.
Coen Burners Canada Inc.
Comalco Limited
Corning Glass Works
Foster Wheeler Limited
Hunt & Moscrop (Canada) Inc.
Industronics Inc.
Inproheat Industries
Konus Systems Inc.
L-K Metal Products Co. Ltd.
Midland Ross of Canada
Nationwide Boiler Inc.
Ordan Thermal Products
Paterson Aire Systems
Peabody Gordon Platt
Petro-Sun
Plantguard Systems
Proenco Systems
The Arthur S. Leitch Company Ltd.
Tranter Canada
Trecan
Utility & Industrial Supply
Vapor Canada
Volcano
Weiss Usa

Additifs à l'eau d'alimentation

Betz Inc.
Buckman Laboratories of Canada Ltd.
Kleen-Flo Tumbler Industries
Magnor Inc.
Metropolitan Refining Co. Inc.
Perolin-Bird Archer
Specialty Chemicals
Sternson
The Riddaire Corporation
Thermidaire Corp. (1974)

Additifs aux combustibles

01 Conditionneurs
02 Émulsifiants
03 Homogénéiseurs

Betz Inc. 01 02 03
Buckman Laboratories of Canada Ltd. 01
Heat Recovery of Montreal 01 02
Kleen-Flo Tumbler Industries 01 02 03
Magnor Inc. 01
Perolin-Bird Archer 01 02
Specialty Chemicals 01
Sternson 01 02 03
Thermidaire Corp. (1974) 01
Wynn's Canada 01 02 03

Chapitre 6

Équipement de test

A-Tech Moisture Surveys
Ametek, Inc., Thermox Instruments Div.
Analygas Systems Ltd.
Bacharach Instrument Company
Baker Instruments Limited 00
Dwyer Instruments Inc.
Extech Systems
FTS Systems, Inc.
Hewlett Packard Canada Ltd.
Leco Instruments Ltd.
Metropolitan Refining Co. Inc.
Ontor
Ordan Thermal Products
Pacer Industries
RAB Dedesco
Scarborough & Grant
Standard Equipment Co.
Sugar Hut Hill Holdings
Wahl International
Wilgood
Willer Engineering

Systèmes pour les déchets de bois

01 Brûleurs à lit fluidisé
02 Gazification
03 Brûleurs à chambres multiples
04 Chaudières garnies
05 Pyrolyse
06 Brûleurs à chambre simple
07 Brûleurs par suspension

Alberta Industrial Development Ltd. **02 05**
B.E.S. Energy Equipment 07
Bigelow-Liptak of Canada Ltd. 06
Brunette Machine Works Ltd. 01 02 04 06 07
C-E Canada 01 07
Canertech Inc. 01
Coen Burners Canada Inc. 04 07
Conamara Limited 03 06 07
Corning Glass Works 03
F.J. Raskin 01 06 07
Foster Wheeler Limited 04
Guaranty Performance Co. Inc. **07**
Heat Recovery of Montreal 02
Hunter Enterprises Orillia Ltd. 04 06
Industronics Inc. **03 05**
Inproheat Industries 01 02 03 05 06 07
Kelley Company Inc. 05
Kerr Controls Limited 04
Konus Systems Inc. 04 06
MacLeod & Grant Ltd. 01 04 07
Maxon Corporation 01 07
Midland Ross of Canada 03 05 06 07
Moldow Dust Control Sys. Ltd. 06
North American Mfg. Co. **04**
Olivine Corp. **03 06 07**
Ordan Thermal Products 01 02 07
Parrsboro Metal Fabricators 04
Peabody Gordon Platt 07
Petro-Sun 01 02 03 04 05 06 07
Ral Products 04
Ray Burner **04**
Robert Bell Ind. Ltd. 04
Slant/Fin 04
Solid Waste Management 03
Tervcon 02 05 07
The G & S Mill, Inc. 06
Trecan 01 02 03 04 05 06 07
Utica Steam Engine & Boiler Works **03**
Weiss Usa **04 07**
Wellons 03 04 06
Wetcom Engineering 03 06
York Shipley 01 04

Brûleurs

01 Brûleurs à gaz
02 Brûleurs à gaz/mazout
03 Autres brûleurs mixtes
04 Brûleurs à charbon pulvérisé
05 Brûleurs autorégulateurs
06 Systèmes de contrôle de brûleurs

Aero Environmental Limited 01 02
CEA Canada 01 02 03 06
Peabody Engineering 01 02 03 04
Pendell Boiler 01 02
Robert Bell Ind. Ltd. 01 02
Volcano 01 02 03

Chapitre 7

Systèmes à vapeur et condensats

Conception et entretien

L'équipement de chauffage par vapeur présente plusieurs modes d'économie d'énergie car là où l'équipement n'est pas adéquat ou encore mal entretenu, il y a de fortes chances que les pertes d'énergie soient importantes.

Les pertes aux chaudières

Les pertes aux chaudières résultent principalement de l'entartrage des tubes du four, des dépôts calcaires dans le réservoir, des chicanes endommagées et des accumulations de suie. Ces conditions peuvent être contrôlées par l'emploi *d'additifs et d'adoucisseurs de l'eau d'alimentation*, par le *nettoyage manuel ou automatique de la chaudière* et par l'utilisation d'un *équipement de purge*.

La purge

La purge de la chaudière représente un point principal de perte d'énergie. Non seulement on y perd l'eau, mais aussi des produits chimiques et de la chaleur. Une contre-mesure minimale serait un programme régulier de test de dissolution totale des solides dans l'eau de la chaudière et de réglage du taux de purge. Pour les chaudières de 200 hp ou plus, on devrait considérer le *contrôle automatique de la purge* par conductivimètres, surtout si les taux de retour de condensats varient ou si les tests de l'eau de chaudière, effectués par un opérateur, ne sont pas précis.

Réservoir de détente

L'installation d'un *réservoir de détente* permettra de *récupérer la vapeur* à basse pression qui s'est échappée lors de la purge. Cette vapeur pourra alors servir à la désaération et être acheminée à travers un échangeur de chaleur pour réchauffer l'eau d'alimentation. Un tel système requiert un investissement moyen.

Récupération des condensats

Les pertes de condensats exigent un apport d'énergie. Il est donc essentiel de les ramener à la chaudière de façon économique.

Un faible taux de retour des condensats affectera le contrôle de l'eau d'alimentation et causera l'entartrage des tubes du réservoir. De plus, comme l'eau d'alimentation doit être chauffée, il s'en suit une augmentation des coûts en eau et en produits chimiques.

Économiseurs et réchauffeurs

Les *économiseurs* d'eau d'alimentation et les *réchauffeurs* d'air de combustion aideront la récupération de la chaleur des gaz d'échappement. Dans le cas des chaudières à haute pression, l'emploi d'un économiseur sera préférable.

Purgeurs automatiques

Un *purgeur automatique* est tout simplement une soupape s'ouvrant pour laisser passer l'air de condensat et le CO_2, et se fermant pour garder les vapeurs. Selon la dimension du purgeur et l'importance des fuites, on peut perdre l'équivalent des frais d'achat et d'installation du purgeur à tous les 10 à 40 jours. Voici quelques types de purgeurs: *purgeurs mécaniques* dont le *purgeur à cloche ouverte et inversée* et *à flotteur; purgeurs à flotteur et thermostatiques, purgeurs à soufflet et thermostatiques bimétalliques*; et *purgeurs thermodynamiques à clapet*.

Chapitre 7

Éliminer les fuites

Un tuyau à vapeur non isolé perdra, en chaleur irradiée, l'équivalent de la valeur de l'isolant et de son installation à tous les 30 à 60 jours, suivant la dimension du tuyau, la pression et la température des vapeurs. De plus, là où les vapeurs servent à créer un vide dans les éjecteurs, il serait bon de considérer des pompes à vide mécaniques.

Lorsqu'elle devient détrempée, l'isolation de la tuyauterie extérieure perd énormément de son efficacité. En plus de s'assurer de l'épaisseur appropriée d'isolant, on devrait voir à ce que les coupe-vapeur sont en excellent état. Plusieurs produits sont offerts pour la *réparation des fuites* sur la *machinerie à vapeur*.

En conclusion, tout système de production et d'alimentation à vapeur doit être protégé par un programme régulier et bien établi d'entretien préventif.

Liste des produits

Systèmes de contrôle des condensats

Armstrong International, Inc.
Conval Equipment
Copes-Vulcan Div.
Escodyne Ltd.
Gelber Pumps, Inc.
Inproheat Industries
Leeds & Northrup Canada
Ordan Thermal Products
Plantguard Systems
Pumps & Softeners
Robert Bell Ind. Ltd.
Roth Pump
Stickle Steam Spec. Co.
Toyoda America
York Shipley
Zedex Products

Systèmes de récupération

ACS-Hovac
Alfa-Laval Ltd.
Atlas Engineering & Machine Co. Ltd.
Circul-Aire Inc.
Coen Burners Canada Inc.
Conval Equipment
Escodyne Ltd.
ESD Industries Inc.
Fram Canada Inc.
Hick Hargreaves and Co. Ltd.
ITT Fluid Products Canada
Makinson Winchester Inc.
Ordan Thermal Products
Plantguard Systems
Proenco Systems
Riley-Beaird
Roth Pump
Stickle Steam Spec. Co.
The Arthur S. Leitch Company Ltd.
The Johnson Corporation
Toyoda America
United Air Specialists
Utility & Industrial Supply

Dépistage des fuites de vapeur

Escodyne Ltd.
MacLeod & Grant Ltd.
Makinson Winchester Inc.
Mikron Instrument Co.
S.L. Watkins & Assoc.
Sentrol Systems
Toyoda America
Utility & Industrial Supply

Purgeurs à vapeur—par application

01 Systèmes de distribution
02 Évaporateurs
03 Réservoirs de détente
04 Chaudières chemisées
05 Chauferettes d'air de traitement
06 Échangeurs caloriférigues à calandre et tube
07 Équipement de chauffage
08 Machines d'absorption des vapeurs
09 Circuits traceurs

American Standard 06
Armstrong International, Inc. 01 03 04 05 06 09
Barnes and Somes Inc. 01 02 03 04 05 06 07 08 09
C-E Canada 02 06
Corning Glass Works 06
Danfoss Mfg. Co. Ltd. 07
Datron Systems Inc. 01 02 03 04 05 06 07 08 09
Dean Products Inc. **02 03 04**
Environmental Energies Inc. **00**
Escodyne Ltd. 01 02 03 04 05 06 07 08 09
Filterite/Brunswick Tech. Div. 04
Flexitallic Gasket Co. Inc. **01 03 04 05 06 07 08 09**
Honeywell Braukmann Inc. 01
ITT Reznor 07
KeepRite Inc. 05 06 07
Liquiflame 07
Longhill Combustion Products Ltd. 07
Makinson Winchester Inc. 01 02 03 04 05 06 07 08 09
Ogontz Controls Company 09
Ordan Thermal Products 05 06
P.O. Box 479, 141 Terwood Road 05 07 09
Pendell Boiler 03
Pumps & Softeners 06
Robert Mitchell 06 02
Suntrap Systems 07
Thermidaire Corp. (1974) 01 04 05 06
Toronto Coppersmithing Int'l. 04 06
Toyoda America 01 02 03 04 05 06 07 08 09
Utility & Industrial Supply 01 02 03 04 05 06 07 08 09
Velan Inc. 01 02 05 06
Winter's Thermogauges 06
Yarway Canada 01 02 03 04 05 06 07 09
Young Radiator 06 07

Purgeurs à vapeur—par type

01 Bimétalliques
02 À clapet commandé
03 Thermodynamiques, à clapet
04 À flotteur
05 À cloche inversée
06 Thermodynamiques
07 Thermostatiques

Armstrong International, Inc. 02 03 04 05 06 07
Barnes and Somes Inc. 04 07
Conval Equipment 01 02 03 04 05 06 07
Datron Systems Inc. 02 03 04 05 06 07
Escodyne Ltd. 01 02 03 04 05 06 07
Flexitallic Gasket Co. Inc. **07**
HCP Industrial Sales 06
Henlex 03 04 05 07
Makinson Winchester Inc. 01 03 04 05 06 07
Ogontz Controls Company 07
P.O. Box 479, 141 Terwood Road 07
Thermidaire Corp. (1974) 01
Toyoda America 03 04 05
Velan Inc. 01 03 05 06 07
Wright-Austin 04 07
Yarway Canada 01 02 03 05 06 07

Chapitre 8

Électricité

La consommation

Quels que soient les types d'édifices ou de modes de production industrielle, les possibilités d'économies d'énergie électrique abondent. Non seulement peut-on réduire la consommation mais aussi la demande aux périodes de pointe; conséquemment, on pourra réduire la demande à la centrale. Une telle action combinée est appelée *gestion de la charge*. Parmi les autres possibilités, on retrouve l'amélioration du facteur de puissance et les réductions de charge.

Le premier mode, et le plus simple, est de *réduire la consommation totale d'énergie électrique*. Trois principes fondamentaux s'appliquent:

(a) arrêter et éteindre tout équipement qui n'est pas utilisé, avec l'établissement d'un programme d'éclairage, de chauffage, d'aération et de climatisation:
(b) abaisser la température (en permanence ou du moins à long terme);
(c) maximiser l'efficacité de tout équipement ou procédé consommant de l'électricité.

Demandes de pointe

Réduire les demandes de pointe est relativement complexe et requiert l'analyse de la fréquence et de la magnitude des demandes de pointe, la définition du ou des cycles au cours desquels les pointes se produisent, et l'identification de la cause de chaque pointe. Cela établi, on peut alors rechercher des méthodes pour répartir l'utilisation de l'équipement et éliminer les charges superflues lors de ces périodes de pointe.

Facteur de puissance

Améliorer le facteur de puissance dépend des frais de pénalité imputés par les services publics à un *facteur de puissance* sous la normale, et des frais pour une telle *modification*. Bien qu'un investissement en capital soit nécessaire, le rendement peut être élevé. Un faible facteur de puissance est habituellement causé par des moteurs d'induction C.A. (ceux sans charge, surtout), des transformateurs et des ballasts d'éclairage. La pratique la plus courante est l'addition de *condensateurs*; c'est habituellement la méthode la plus avantageuse lorsqu'elle est appliquée en assemblages.

L'addition de condensateurs individuels à de gros moteurs d'induction présente l'avantage de réduire l'appel en courant du système et peut s'avérer fort pratique pour les installations montées à l'étroit.

Contrôle

Si on veut réaliser de telles économies, il faut un certain contrôle. Après avoir effectué une étude d'usage, il serait bon de considérer les divers appareils de contrôle offerts sur le marché: *limiteurs de consommation, indicateurs de consommation, planificateurs de charge* et *régulateurs de cycle*. Ces appareils peuvent être de simples commutateurs mécaniques comme des *systèmes informatisés de contrôle* des plus sophistiqués.

Moteurs plus efficaces

Il existe maintenant de nouveaux moteurs d'induction C.A. plus efficaces. Bien qu'il y ait un avantage immédiat dans la réduction des frais de consommation, la période de remboursement de la prime sur le coût initial dépend de la fréquence d'utilisation des moteurs. Les cas les plus avantageux sont là où les moteurs en place:

Chapitre 8

(a) sont arrivés à leur période de remplacement, et
(b) fonctionneront trois quarts par jour.

Un remplacement de moteurs par des modèles plus efficaces devrait être étudié sérieusement car, habituellement, le rebobinage des vieux moteurs résulte en un rendement réduit.

Liste des produits

Gestion des charges

01 Systèmes de contrôle de la consommation électrique
02 Systèmes de contrôle des charges de pointe
03 Condensateurs correcteurs du facteur de puissance

ADMIC Controls 01 02
ADT Energy Systems Ltd. 01 02
ASCOLECTRIC Limited 02
ASEA Ltd. 03
Atlas Polar Company Limited 02
Automatic Controls Systems 01 02
Beckman Instruments, Inc. 01 02
Bristol of Canada 01 02
CSE Ontario Limited 01 02
Can-Eng Sales 01
Canadian General Electric 01 03
Comalco Ltd. 01 02
Comington Computer System Corp. 01
Conserval Engineering Inc. 01
Control Automation Ltd. 01 02
Control Devices 01 02
Corning Glass Works 03
Crompton Instruments Ltd. 01 02
Douglas Power Equipt. Ltd. 01 02 03
E.A. Electric 01 02 03
Electrodesign Ltd. 03
Encon Systems Inc. 01 02
Energy Management Corp. 01 02
Energy Systems Company 01 02
Gen-Tec Inc. 01 02 03
George Ellison Ltd. 01 02 03
George Kelk Limited 01 02
H.O.P. Consulab Inc. 01 02 03
Heinemann Electric 01
Hewlett Packard Canada Ltd. 01 02
Honeywell Ltd. 01 02 03
Instruments Champagne Int'l. 01
Johnson Controls Ltd. 02
Kalglo Electronics Co. Inc. 02
Leeds & Northrup Canada 01 02
Mac Victor Mfg. 01
Margaux Controls Canada Inc. 01 02
Material Control, Inc. 01
Modudata Systems Ltd. 01 02 03
Multitrol Corp. 01 02
National Electric 01 02 03
Olman Instruments 01
Ordan Thermal Products 01 02 03
P.S.C. Controls 01 02 03
Pacific Technology 01 02
Peel Energy Management 01 02
Powsave Systems 01 02
Pro Controls 01 02
Rantach Electronics 01
Richard W. Watt & Associates 01 02
Russelectric 01 02
Scientific-Atlanta 01 02
Siemens Electric 03
Solidyne 01 02
Sprague Electric of Canada 03
Square D Canada 01 02
Synerco Systems For Energy Conservation 01 02 03
T. W. Wilson Sales 03
Tecnecon Electronics Inc. 01
Texas Instruments 01 02
Thermolec 02
Time Mark 01 02
Tork Canada 02
Trimax Controls 01 02
Vallance Brown 01 02 03
Westcan Electrical Mfg. 01
Westinghouse Canada 01 02 03

Moteurs et systèmes motorisés

01 Moteurs électriques très efficaces
(Le fournisseur indiquera le degré d'efficacité)
02 Systèmes de contrôle des moteurs
03 Entraînements à régime variable

ADMIC Controls 02 03
ASEA Ltd. 01 02 03
Adalet-PLM 02
Ainsworth Electric 02 03
Allen-Bradley Canada Limited 02 03
Aston Ziehl Motors Inc. 01 02
Automatic Controls Systems 02 03
BBC Brown Bovari Canada Inc. 03
Baldor Electric Co. 01
Beal Controls Limited 02 03
Bodine Electric Co. 01 02 03
Brook Crompton Parkinson Ltd. 01 03
Canadian General Electric 01 02 03
Carbone Lorraine Corp. 03
Carrier Canada Limited 03
Chloride Canada Limited 03
Conserval Engineering Inc. 02
Cutler-Hammer Industrial Control 02 03
Danfoss Mfg. Co. Ltd. 03
Doerr Electric Corp. 01 03
E.A. Electric 02 03
Eaton Corporation 01 02 03
Electrodesign Ltd. 02
Furnas Electric Canada Ltd. 02
GTE Products Corp. 02 03
Gates Canada Inc. 03
George Ellison Ltd. 02
H.O.P. Consulab Inc. 02 03
Hayes Dana 03
Hayward Tyler 01
Hewlett Packard Canada Ltd. 02
Instrumentation & Control Systems Inc.
Kalglo Electronics Co. Inc. 03
Kenscott Limited 02 03
Klockner Moeller Ltd. 02
Leeson Electric Corp. 01
MTE 02
Mannesmann Demag Ltd. 03
Marathon Electric 01
Napier-Reid Ltd. 03
Ordan Thermal Products 02
Parametrics 02 03
Peerless Pump 03
Phelan Bros. 01 02 03
Reliance Electric 02 03
Ronan Engineering 02
Roto Aire Dist. Can. 03
Saftronics 02 03
Siemens Electric 01 02 03
Solar Centre 03
Sommers Motor General or Sales 01 02 03
Square D Canada 02 03
Sterling Power System 01 03
Telemecanique Canada 02 03
Texas Instruments 02
Vallance Brown 01 02
Wer Canada 01 02 03
Westinghouse Canada 01 02 03
Wylain Canada 02
Zero-Max 03

Chapitre 9

Contrôles et instruments

Contrôle et vérification

L'importance des *instruments de mesure* dans la gestion de l'énergie tient du fait qu'ils *contrôlent* de façon permanente l'énergie consommée et les facteurs affectant cette consommation. Ils servent aussi aux vérifications périodiques et à la recherche de nouveaux modes qui mèneront à une efficacité améliorée des systèmes.

Précision

Pour obtenir des données exactes, il est important de calibrer et d'entretenir régulièrement tous les instruments. Les *chaudières*, par exemple, sont habituellement équipées d'appareils intégrés de mesure du *courant des vapeurs*; les débitmètres communs sont cependant sujets à des erreurs importantes s'ils ne sont pas réglés aux pressions de fonctionnement, qui diffèrent des pressions de calibration. Les procédés de *combustion* par combustibles liquides nécessiteront des instruments assez précis pour mesurer la consommation; on peut utiliser des *débitmètres* intégrés au circuit ou des *jauges de niveau* dans les réservoirs. Ces instruments doivent habituellement être ajoutés aux systèmes déjà en place. L'achat d'un analyseur d'oxygène et de combustion portatif sera justifié si le système à surveiller consomme de grandes quantités de combustible.

Les relevés

Le contrôle précis de la consommation d'énergie débute et se termine par des relevés. Parmi les instruments de mesure utiles, on retrouve: les *thermomètres*, les *anémomètres*, les *ampèremètres*, les *minuteries*, les *tachymètres* et les *ampèremètres enregistreurs*.

Gestion de l'énergie dans les édifices

Dans les édifices et les usines, le contrôle de la consommation d'énergie peut se faire par divers systèmes, enregistrant la consommation d'énergie de *l'éclairage*, de *l'aération* et du *chauffage*, de *la climatisation*, de *l'équipement de traitement* et de *la machinerie*.

Il existe trois types de gestion de l'énergie pour les services d'un édifice:

(a) contrôle manuel (comptant sur les employés pour tout éteindre et allumer);
(b) contrôle par machines simples (*minuteries*, par exemple); et
(c) *contrôle par systèmes informatisés*.

Parmi les diverses fonctions de *gestion de l'énergie* par système informatisé, il y a: *fonctionnement minuté, fonctionnement cyclique, arrêt-marche optimal, contrôle de l'aération, contrôle des économiseurs (climatisation)* et *contrôle de l'enthalpie*.

Le *contrôle digital direct* réfère à l'analyse et à la commande directe de l'équipement par des contrôles digitaux; ce mode se retrouve dans les institutions et les édifices commerciaux.

L'éclairage

Il existe de plus en plus de modes variés de contrôle de l'éclairage:

Chapitre 9

commutateurs par ultrasons, cellules photoélectriques, détecteurs cinétiques, gradateurs automatiques, etc. Ces dispositifs conviennent à tous les systèmes, y compris les fluorescents et les lampes à décharge de grande intensité.

Les industries

Les *contrôles programmables* sont déjà utilisés par les industries pour certains procédés et traitements. Faciles à programmer, ils servent à de nombreuses fonctions de gestion de l'énergie.

La combustion

Les systèmes de *contrôle de la combustion* seront utiles pour améliorer le contrôle du rapport air/combustible des brûleurs. Les systèmes entièrement contrôlés et les *systèmes à faible teneur en oxygène* sont de plus en plus acceptés. Les *contrôles automatiques de purge* valent aussi la peine d'être considérés.

Les procédés

L'installation de *systèmes informatiques de contrôle direct* des procédés consommant beaucoup d'énergie sera un investissement dont le remboursement pourra se faire rapidement grâce aux économies réalisées.

Liste des produits

Analyseurs

01 Pureté de l'air
02 Combustion
03 Gaz de combustion
04 Procédé
05 Eau
06 Opacité

Acme Engineering Prod. Ltd. 01
Ametek, Inc., Thermox Instruments Div. 03
Analygas Systems Ltd. 01 02 03 04
Autocon Industries, Inc. 05
Aviation Electric Ltd. 01 04
Bacharach Instrument Company 02 03
Barber Industries 04
Beckman Instruments, Inc. 01 02 03 04 05
Bristol of Canada 02 04 05
Caframo Ltd. 01
Caltrol 01 03 04 05
Can-Eng Sales 02
Canadian Applied Technology 01 05
Capital Controls 05
Circul-Aire Inc. 00
Cla-Val Canada Ltd. 05
Cleveland Controls Inc. 02 03 04 05
Coen Burners Canada Inc. 02
Comeau Technique Ltd. 01 05
Conamara Limited 02
Dwyer Instruments Inc. 03 08 09 15
Dynatron Inc. 01 03 06
Emerson Electric Canada Ltd. 02
Energy Management Systems 01 02 03 04 05
Energy Systems Company 01
Energy Systems Inc. 02
Enmet Canada Ltd. 01
Escodyne Ltd. 04
Esterline Angus Instrument Corp 04
Extech Systems 01 02 03
FE Myers Can. Ltd. 05
Fielding Crossman & Assoc. Ltd. 03 04 05
Fischer & Porter (Canada) Ltd. 04
Foxboro Canada Inc. 04
Furneco Industrial Supplies & Instr. Co. Ltd. 02 03
Gas Energy Inc. 02
Hach Company 04 05
Hewlett Packard Canada Ltd. 01 02 03 04 05
Inficon Systems Ltd. 02 03 04 05
Inproheat Industries 02 04 05
Instruments Champagne Int'l. 02 03 04 05
Kahn and Company 01
Leco Instruments Ltd. 04
Leeds & Northrup Canada 01 02 03 04 05
Leonard Electric (1981) Limited 04
Levitt-Safety Limited 01
Liquitrol Ltd. 05
MacDonald Process Equipment Ltd. 04 05
MacLeod & Grant Ltd. 02
Maxon Corporation 02
Measurex Inc. 01 02 03
Metex Corporation Ltd. 05
Milton Roy Industries Ltd. 01 02 03 05
Motorola Ltd. 02 05
National Sonics Div of Xertex 05
Newport Electronics 04
North American Mfg. Co. 02 03
Ontor 02
Ordan Thermal Products 02 03 04
Paco Pumps 05
Photomation 06
Presto Tek 05
RAB Dedesco 02 03
Research Appliance Co. 01 02 03 04
Robert H. Wager 02
Robertshaw Controls Canada 04
Rochester Instrument Systems 04
Rosemount Analytical 04 05
Safety Supply Canada 01
Scarborough & Grant 02 03
Soget 04
Syncro Flo 05
Teledyne Analytical Instr. 01 02 03 04 05
Teledyne Lears Canada 01
Tervcon 02 05
Texas Instruments 04
Water Refining 05
Weed Instrument Company, Inc. 03 04 05
Western Research 03 04
Willer Engineering 01 02 03 04 05
York Instruments 03

Contrôles—par fonction

01 Gestion de l'énergie d'un édifice
02 Combustion
03 Air comprimé
04 Condensats
05 Consommation électrique
06 Demande en électricité
07 Moteurs électriques
09 Flot
10 Chauffage
11 Humidité
12 Éclairage
13 Régime des moteurs
14 pH
15 Pression
16 Procédé
17 Pompes
18 Vapeurs
19 Température
20 Chronométrage
21 Niveaux

A.W. Cash Valve Mfg. Corp. 03 15 18 19
ADMIC Controls 01 03 05 06 07 08 09 10 11 12 13 15 17 19 20
ADT Energy Systems Ltd. 01 05 06 07 08 09 10 11 12 13 15 17 19 20
AMF/Paragon Electric Division 01 06 20
APE Canada Inc. 03 08
ASCOLECTRIC Limited 01 06 09 12 16 19
ASEA Ltd. 07 13
Adalet-PLM 07
Ainsworth Electric 13
Airtechni Inc. 04
Alexander D. Smart Ltd. 10 11 15 16 19
Allen-Bradley Canada Limited 07 08 12 13 15 19 20
Allied Witan Co. 03
American Stabilis, Inc. 01 10 19 20
Ametek, Inc., Thermox Instruments Div. 02
Analygas Systems Ltd. 02 11 14 15
Analytical Measurements of Canada Ltd. 14 19
Andover Controls Corp. 01
Armstrong International, Inc. 04 11 18

Chapitre 9

Aston Zieht Motors Inc. 08 13
Autocon Industries, Inc. 09 13 14 15 16 17
Automatic Controls Systems 01 05 06 11 12 13 16 17 18 19 20
Aztec Canada Ltd. 10
BBC Brown Boveri Canada Inc. 07 09 11 13 14 15
Bailey Controls 02 09 15 18 19
Baker Instruments Limited 09 15 19
Banvil Limited 07 08 13
Barber Industries 09 15
Barber-Colman of Canada Ltd. 01 10 11 16 19
Beckman Instruments, Inc. 01 02 04 08 11 14 16 18 19
Beel Controls Limited 07 13 17 19
Berkeley Pump Ltd. 17
Blenkhorn & Sawle Limited 16
Bodine Electric Co. 07 13
Breslove Separator Co. 08
Bristol of Canada 02 05 06 09 11 14 15 16 17 18 19 20
Broan Ltd. 13 20 12
Brook Crompton Parkinson Ltd. 07
Brooks Instrument Div. 09
Brooks Instrument Division 09 15
C-E Canada 02
CESCO 01 05 06 10 11 12 18 19 20
CSE Ontario Limited 01 05 06 10
Caframo Ltd. 08 10
Caltrol 09 10 11 14 16
Can-Eng Sales 02 15 16
Canada Fans 08
Canadian General Electric 05 06 07 09 12 13 15 16
Canadian General Electric 01 07 12
Canadian Worcester Controls Ltd. 09
Canarm Ltd. 07 08
Canertech Inc. 05
Capital Controls 09 15 17
Chemiquip Canada Inc. 09 15
Circul-Aire Inc. 01 03 10
Cla-Val Canada Ltd. 15
Cleveland Controls Inc. 02 19
Coen Burners Canada Inc. 10
Colorado Electro-optics Inc. 12
Comalco Ltd. 01 05 06 09 10 19 20
Comeau Technique Ltd. 14 19
Comington Computer System Corp. 01 05 06
Compak Canada Inc. 03
Conamara Limited 02
Conserval Engineering Inc. 12 18 19 20 01 05 10
Contric Automation Ltd. 01
Control Devices 01 05 06 07 08 09 10 11 12
Conval Equipment 03 04 15 16 19
Corning Glass Works 02
Crompton Instruments Ltd. 06
Cutler-Hammer Industrial Control 01 13
Danfoss Mfg. Co. Ltd. 10 15 18 19
Devar Inc. 01 02 05 09 13 14 16 19
Douglas Power Equipt. Ltd. 01 05 06
Dresser Canada Inc. 15 16 19
Duncan Instruments Ltd. 05 06 12 19
Durakool Inc. 01 06 07 10 12 17 19 20
Dynatron Inc. 00
E.A. Electric 01 06 12
EEV Canada Ltd. 01
Electric Power Accessories Co. Limited
Electrodesign Ltd. 07 13
Electrohome Limited 07
Electromatic Components Ltd. 06 08 10 11 12 13 14 15 16 17 19 20
Emerson Electric Canada Ltd. 02 07 08 10 19
Empire Controls 01 05 06 08 10 12 19 20
Encon Systems Inc. 05 06
Energy Management Corp. 01 04 05 06 07 08 09 10 11 12 13 15 16 17 18 19 20
Energy Management Systems 01 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20
Energy Systems Company 01 05 06 08 10 11 12 15 18 19 20
Energy Systems Inc. 02
Escodyne Ltd. 10 11 15 16 17 18 19 20
Esterline Angus Instrument Corp 02 05 06 14 15 16 17 18 19
FE Myers Can. Ltd. 17
FX Systems Corporation 15 16 19
Fielding Crossman & Assoc. Ltd. 09
Fischer & Porter (Canada) Ltd. 09 16
Fisher Controls Co. of Canada Ltd. 01 03 04 09 15 16 18 19
Flair Hydronics (Canada) Ltd. 01 10 18 19
Foxboro Canada Inc. 02 05 06 09 14 15 16 19
Furnaco Industrial Supplies & Instr. Co. Ltd. 15
GTE Products Corp. 05 06 13
Gas Energy Inc. 02 10 19
Gen-Tec Inc. 05 06 10 20
George Kelk Limited 05 06
Graham Company 07 08 13
Guildline Instruments Limited 19
H.O. Trerice 10 11 15 19
H.O.P. Consulab Inc. 01 05 06 07 10
Haskel Inc. 03 09 15 17
Heat Recovery of Montreal 02 04
Hecon Canada Inc. 16 20
Hoke Controls Ltd. 03 04 09 10 15 16 17 18 19
Honeywell Braukmann Inc. 01 09 10 15 18 19 20
Honeywell Ltd. 01 03 06 07 08 10 11 12 15 19
ICG Manufacturing Ltd. 02 08 10 19
ITT Fluid Products Canada 01 02 03 04 10 15 16 17 18
ITT Vulcan Electric 19
Industrial Air Inc. 08
Inficon Systems Ltd. 02
Ingersoll-Rand Canada Inc. 03
Inproheat Industries 02 04 09 16
Instrumentation & Control Systems Inc. 13 16 20
Instruments Champagne Int'l. 01 02 05 06 09 10 11 14 15 16
Intertechnology Limited 01 11 15 19
Intralec 01
Isolation Systems 01
Jo-Bell Products Inc. 04
John C. Ernst Co. 09
Johnson Controls Ltd. 01 02 03 05 06 08 09 10 11 12 15 16 18 19 20
Kahlsico Int'nl. Corp. 11 19
Kaigio Electronics Co. Inc. 06 08 10 12 19
Klockner Moeller Ltd. 07
Lakeshore Electric Corp. 05 06
Land Instruments Inc. 19
Leeds & Northrup Canada 02 04 05 06 09 10 11 14 15 16 19
Leslie International 15 18 19
Liquiflame 01 10 11 19
Liquitrol Ltd. 15 19
Lisi Aero Guide Inc. 01 07 13 19
Lisle-Metrix Ltd. 11 14 16 20
M.H. Rhodes 20
MCC Powers 01 06 12 19
MTE 07 12 13 15 20
Mac Victor Mfg. 01 05 06 07 08 10 12 19 20
MacDonald Process Equipment Ltd. 09 13 15 16 18 19 20
Makinson Winchester Inc. 15 18 19
Margaux Controls Canada Inc. 01 05 06 08 10 11 19 20
Markko Construction 19
Marsh Instrument Canada 15 19
Masoneilan Canada Ltd. 15 19
Material Control, Inc. 01 05 06
Matheson 03 09 15
Maxon Corporation 02 09
Measurex Inc. 02 06 16
Met-Pro Corporation 17
Metex Corporation Ltd. 09 14
Metritape, Inc. 21
Micronet Limited 01 05 06 16
Mikron Instrument Co. 19
Milton Roy Industries Ltd. 02 04 09 14
Modudata Systems Ltd. 01 05 06
Moore Industries Inc. 02 03 04 05 06 07 08 09 10 12 13 14 15 16 17 18 19 20
Motorola Ltd. 06 07 08 17
Multitrol Corp. 01 05 06 07 08 09 10 11 12 13 15 16 17 18 19 20
Napier-Reid Ltd. 08 17
National Sonics Div of Xertex 14 16
Newport Electronics 09 13 15 16 19 20
North American Mfg. Co. 02 06 19
Numatics 03
OHM-Rite Electrical 08 10 12
Ogontz Controls Company 18 19
Ohio Semitronics 05 06
Olmen Instruments 05 06
Ontor 10 11 19
Ordan Thermal Products 02 04 05 06 08 09 10 15 16 18 19 20
P.S.C. Controls 01 05 06
PSG Industries 10 19 20
Parametrics 13
Pacific Technology 01 05 06
Paco Pumps 04 15 17
Peel Energy Management 01 05 06 08 10 12 19 20
Peerless Pump 08 09 13 15 17 19
Phelan Bros. 07 13 14
Plantguard Systems 01 04
Powsave Systems 01 05 06 10 12 19
Precision Multiple Controls 12 20
Preso Industries 09
Presto Tek 01 14 19
Pro Controls 01 02 05 06 16
Promac Controls Inc. 07 09 13 15 16 19 20
R.R. Entwistle Ltd. 08
Ramsey Controls 13
Reuter-Stokes Canada 19
Rexanne Products 19
Robert H. Wager 02
Robertshaw Controls Canada 01 10 19
Rochester Instrument Systems 05
Rockwell International of Canada 15
Ronan Engineering 07
Rosemount Analytical 14
STC Controls 16
Safety Supply Canada 08 10
Saftronics 07 13 17 19
Scarborough & Grant 02 16 19
Scientific-Atlanta 01 05 06 08 09 10 12 19
Sentrol Systems 01
Serfilco 03 14
Shortridge Instruments 01 09
Siemens Electric 07 13
Simplex Int'l Time Eq. 01 05 06 07 08 12
Singer Company of Canada 09 15 19
Sirco Products 15 19
Skan-A-Matic 16
Solar Centre 01 05 10 17 19 20
Solidyne 01 05 06 19
Sommers Motor General or Sales 07 08 09 10
Square D Canada 01 05 06 15 17
Standard Equipment Co. 01 04 15 18 19
Suntrap Systems 08 10 14 19
Surgeonics 10
Syncro Flo 17
Synerco Systems For Energy Conservation 01 05 06 08 12 19 20
Taco (Canada) 10
Tanner Systems of Canada 04
Tecnecon Electronics Inc. 12 13
Tekelek 13
Teledyne Inet 06 07
Telemecanique Canada 07 13
Tervcon 01 06 12 15 17
Texas Instruments 01 05 06 07 08 09 10 11 13 14 15 16 18 19 20
The Electric Tachometer Corp. 13
The Mercoid Corporation 15 19
The Riddaire Corporation 10
Therma-Ray Mfg. 19 20
Thermal Energy Devices 19
Thermax Canada 07
Thermo Electric (Canada) 05 19
Thermolec 06 10 19
Time Mark 05 06 20
Timeco 20
Tork Canada 12 20
Transmation Canada 19
Trimax Controls 01
Uehling Instrument 15 16
Union Pump 17
United Electric Controls (Canada) 15 19
Valcor Engineering 09
Vallance Brown 01 08 12 20
Veeder-Root of Canada 20
Veronics Instruments 03 11
Viking Pump Co. of Canada 17
Wahl International 19

Chapitre 9

Water Refining 14
Waugh Controls 16
Weed Instrument Company, Inc. 19
Weiss Instruments 19
Wer Canada 07
West Instrument 10 11 15 19
West Way 10 19
Westcan Electrical Mfg. 01 05
Westinghouse Canada 02 07 09 12 13 14 15 19
Westinghouse Vectrol 05 06 07 13
Wilcorp Mfg. 01 08
Wilgood 01 04 09 10 19
Willer Engineering 02 09 14 15 16 19
Wiremold Canada 01 20
Wylain Canada 07 17
York Instruments 11 14
Zenith Controls 20
Zimpro Hydro Clear 16

Contrôles—par type

01 Électriques
02 Électroniques
03 Mécaniques
04 Par microprocesseur
05 À cellule photoélectrique
06 Pneumatiques
07 À thermostat

A.W. Cash Valve Mfg. Corp. 06
ADMIC Controls 01 02 04 05 06 07
ADT Energy Systems Ltd. 01 02 03 04 05 06 07
AMF/Paragon Electric Division 01 02 03 04 05 07
ASCOLECTRIC Limited 01 02 06
ASEA Ltd. 01 02
Acme Engineering Prod. Ltd. 02 04
Adalet-PLM 01
Alexander D. Smart 02
Alexander D. Smart Ltd. 02 04
Allen-Bradley Canada Limited 01
Allied Witan Co. 06
American Stabilis, Inc. 02 04 07
Anbak Sales Canada Ltd. 07
Andover Controls Corp. 04
Atlas Polar Company Limited 01 02
Automatic Controls Systems 01 02 04 07
BBC Brown Boveri Canada Inc. 02
BLM Automatic Clutch Ltd. 03
Bailey Controls 02 04 06
Baker Instruments Limited 02 04 05 07
Banvil Limited 02
Barber Industries 01 03 06
Barber-Colman of Canada Ltd. 01 02 04 06
Beckman Instruments, Inc. 02 04
Beel Controls Limited 01
Bindicator Company 01 02 03 06
Blenkhorn & Sawle Limited 04
Bodine Electric Co. 02
Bristol of Canada 01 02 03 04 06
Broan Ltd. 07
Brooks Instrument Division 01 06 07
CESCO 02 04 05 06
CSE Ontario Limited 01 02
Caltrol 01 04 06
Can-Eng Sales 01 02 03 04 06
Canadian Applied Technology 02 04
Canadian General Electric 01 02 03 04 05
Canertech Inc. 01
Capital Controls 01 02 03 06
Chemiquip Canada Inc. 06
Chromalox Canada 07
Cla-Val Canada Ltd. 01
Cleveland Controls Inc. 01 02
Colorado Electro-optics Inc. 05
Comalco Ltd. 01 02 03 04 07
Comeau Technique Ltd. 01
Comington Computer System Corp. 04
Conserval Engineering Inc. 01 02 04 05
Contric Automation Ltd. 01 02 04 07
Control Devices 01 02 04
Conval Equipment 06
Copes-Vulcan Div. 02
Crompton Instruments Ltd. 01 02
Cutler-Hammer Industrial Control 01 02 04
Danfoss Mfg. Co. Ltd. 01 02 07
Devar Inc. 02
Douglas Power Equipt. Ltd. 01 02 04
Dresser Canada Inc. 02 06 07
Durakool Inc. 01
Dwyer Instruments Inc. 06
Dynatron Inc. 02 04
E.A. Electric 01 04
Electric Power Accessories Co. Limited
Electrodesign Ltd. 01 02
Electromatic Components Ltd. 01 02 04 05 07
Emerson Electric Canada Ltd. 07
Empire Controls 01 02 03 04 05 06 07
Encon Systems Inc. 04
Energy Management Corp. 01 02 04 05
Energy Management Systems 04 06 07
Energy Systems Company 01 02 03 04 05 06 07
Energy Systems Inc. 04
Escodyne Ltd. 01 03 07
Esterline Angus Instrument Corp 02 04
FE Myers Can. Ltd. 01
Fischer & Porter (Canada) Ltd. 02 06
Fisher Controls Co. of Canada Ltd. 02 03 04 06
Flair Hydronics (Canada) Ltd. 01 07
Foxboro Canada Inc. 02 06
Furnas Electric Canada Ltd. 01
GTE Products Corp. 01 02
Gas Energy Inc. 01 02 07
Gen-Tec Inc. 01 02 04
Gould Inc., Industrial Controls Division 01 02 05
H.O. Trerice 01 03 06 07
H.O.P. Consulab Inc. 01 02 04 07
Haskel Inc. 06
Hecon Canada Inc. 01 02 05 06
Heinemann Electric 01 02
Hoke Controls Ltd. 02 03 04 06
Honeywell Braukmann Inc. 01 03
Honeywell Ltd. 01 04 06 07
ITT Fluid Products Canada 06 07
ITT Vulcan Electric 07
Industronics Inc. 01 02 04
Inficon Systems Ltd. 01 02 06
Inproheat Industries 01 02 03 04
Instrumentation & Control Systems Inc.
Instruments Champagne Int'l. 02 04
Intertechnology Limited 02 04
Intralec 01 02 03 04 07
Isolation Systems 01
John C. Ernst Co. 01 03
Johnson Controls Ltd. 01 02 03 04 06 07
Kahn and Company 06
Kalglo Electronics Co. Inc. 01 02 05
Keene Lighting 01 05
Kenscott Limited 03
Klockner Moeller Ltd. 01 02
L-K Metal Products Co. Ltd. 07
Lakeshore Electric Corp. 01 02
Leeds & Northrup Canada 01 02 04
Leslie International 06
Liquiflame 01 07
Liquitrol Ltd. 01 03 06
Lisi Aero Guide Inc. 01 02 06
Lisle-Metrix Ltd. 02
MCC Powers 06 07
MTE 01 02 05 06
Mac Victor Mfg. 03 04
Makinson Winchester Inc. 01 07
Margaux Controls Canada Inc. 04
Markko Construction 02
Masoneilan Canada Ltd. 06
Material Control, Inc. 04
Maxon Corporation 01 03 06
Measurex Inc. 04
Metex Corporation Ltd. 01 02
Metritape, Inc. 01
Micronet Limited 02 04
Milton Roy Industries Ltd. 02 03
Modicon Canada Ltd. 01 02 04
Modudata Systems Ltd. 02
Moore Industries Inc. 02 04
Motorola Ltd. 02 04
Multitrol Corp. 02 04 07
National Sonics Div of Xertex 02
Neeco Industries 01 03 05 06
Newport Electronics 02
North American Mfg. Co. 02 06
Numatics 06
Ogontz Controls Company 07
Ontor 02 03 07
Opcon 05
Ordan Thermal Products 01 02 03 07
P.S.C. Controls 01 02
PSG Industries 01 02 04 07
Parametrics 02
Pacific Technology 04
Paco Pumps 01
Pass & Seymour Canada 02
Peabody Engineering 04
Peel Energy Management 01 02 04 05
Phelan Bros. 01 02
Photomation 05
Plantguard Systems 01 02 04
Potter & Brunfield 01 02 04
Power/Mate Corp. 02
Powsave Systems 01 02 04 05 07
Precision Multiple Controls 01 05
Pro Controls 01 02 04
Promac Controls Inc. 02 04
R.R. Entwistle Ltd. 01
Ramsey Controls 02
Rantach Electronics 02 04
Robert H. Wager 05
Robertshaw Controls Canada 01 06 07
Rochester Instrument Systems 04
Rockwell International of Canada 02
Ronan Engineering 02
STC Controls 02 04
Saftronics 01 02
Scarborough & Grant 01 02 07
Scientific-Atlanta 01 02 04 07
Sentrol Systems 04
Shortridge Instruments 03
Siemens Electric 01 02
Silonex 05
Simplex Int'l Time Eq. 02 04
Singer Company of Canada 06
Skan-A-Matic 05
Solar Centre 07
Solidyne 02 04
Square D Canada 01
Standard Equipment Co. 02
Suntrap Systems 02 07
Surgeonics 04
Syncro Flo 01 02 03
Synerco Systems For Energy Conservation 01 02 03 04 07
Taco (Canada) 02 07
Tecnecon Electronics Inc. 02
Tekelek 02
Teledyne Inet 03
Telemecanique Canada 01 02 04 05 06
Tervcon 02 04 05
Texas Instruments 02 04
The Mercoid Corporation 06 07
Thermal Energy Devices 02
Thermo Electric (Canada) 02
Thermolec Ltd. 02 07
Time Mark 02 04
Timeco 02
Tork Canada 01 02 03 04 05
Transmation Canada 02 04
Trimax Controls 04
United Electric Controls (Canada) 02 03 06
Valcor Engineering 01
Valera Electronics 02 04 07
Vallance Brown 01 05
Veeder-Root of Canada 01 02 03 04 05
Veronics Instruments 02 04
W.C. Dillon & Co. Inc. 02 03
Waugh Controls 02 04
Weed Instrument Company, Inc. 02
Wer Canada 01 02
West Instrument 02 04
West Way 07
Westcan Electrical Mfg. 01
Westinghouse Canada 01 02 07
Westinghouse Vectrol 01 02
Wilcorp Mfg. 01 04
Willer Engineering 01 02 04 06
Wiremold Canada 01 04
Wylain Canada 01
York Instruments 02
Zenith Controls 01
Zimpro Hydro Clear 04

Chapitre 9

Contrôleurs et enregistreurs

01 Ampèremètres
02 Ampère-heure-mètres
03 Anémomètres
04 Calorimètres
05 Contrôleurs de combustion
06 Compteurs
07 Débitmètres
08 Compteur volmétrique des gaz
09 Humidité
10 Hydromètres
11 Hygromètres
12 Kilovar-mètres
13 Contrôleurs de demande en kilovar
14 Kilowatt-mètres
15 Contrôleurs de demande en kilowatt
16 Kilowatt-heure mètres
17 Luxmètres
18 Multimètres
19 Enregistreurs du facteur de puissance
20 Potentiomètres
21 Manomètres
22 Pyranomètres
23 Détecteurs de fuites de vapeur
24 Manomètres (vapeur)
25 Tachymètres
26 Thermomètres
27 Vibromètres
28 Viscosimètres
29 Voltmètres
30 Tubes de niveau
31 pH-mètres

ADMIC Controls 02 15 26
ASEA Ltd. 01 20 25 29
Aeroquip (Canada) Inc. 07
Airflow Developments (Cda) Ltd. 03 11 25 26
Alexander D. Smart Ltd. 09 11 21 23 26 27
Ametek, Inc., Thermox Instruments Div. 05
Amprobe Instrument 01 06 12 14 18 19 26 29
Analygas Systems Ltd. 05 09
Analytical Measurements of Canada Ltd. 31
Associated Research, Inc. 29
Aviation Electric Ltd. 09 20
BBC Brown Boveri Canada Inc. 04 07 09 21 24
Bach-Simpson Ltd. 29 01 06 17 18 25
Bailey Controls 05
Baker Instruments Limited 03 07 09 11 21 25 26
Beckman Instruments Inc. 05 09 11 19
Beel Controls Limited 25
Bently Nevada Corp. 25 27
Blenkhorn & Sawle Limited 27
Bristol of Canada 01 07 09 21 26 29
Brooks Instrument Div. 07 24 30
Caltrol 04 07 09 11
Canada Valve Inc. 30
Canadian General Electric 01 02 05 06 07 12 14 15 16 19 25 27 28 29
Capital Controls 07 20
Chemiquip Canada Inc. 21
Comalco Ltd. 02 04 06 07 14 15 16 30
Comeau Technique Ltd. 07 10 11 17 19 20 25 26 28
Conserval Engineering Inc. 16
Contric Automation Ltd. 14 15
Control Devices 06 30
Conval Equipment 07 21 26
Criterion Instruments Ltd. 01 04 06 12 14 17 19 29
Crompton Instruments Ltd. 01 06 12 14 19 25 29
Datron Systems Inc. 23
Dresser Canada Inc. 08 21 26
Duncan Instruments Ltd. 01 02 03 06 12 14 16 17 18 19 20 25 26 27 29
Dwyer Instruments Inc. 03 07 21
ERDCO Engineering Corp. 07
Electromatic Components Ltd. 01 03 06 21 25 26 29
Empire Controls 13 14 15 16 26
Energy Management Corp. 09 14 15 15 21 26
Energy Management Systems 01 02 03 04 05 06 07 08 09 10 11 14 15 16 17 18 19 20 21 22 24 26 29 30
Energy Systems Company 16
Energy Systems Inc. 05
Ernst Gage Co. 21 26
Escodyne Ltd. 09 21 23
Esterline Angus Instrument Corp 01 02 12 13 14 15 16 18 19 26 29 30
Extech Systems 03 05 09 11 25 26
FE Myers Can. Ltd. 21
Fielding Crossman & Assoc. Ltd. 01 02 07 08 24 30
Fischer & Porter (Canada) Ltd. 07
Fluid Data Inc. 04
Foxboro Canada Inc. 07
Furneco Industrial Supplies & Instr. Co. Ltd. 01 07 21 25 26 29 30
GTE Products Corp. 06
Gen-Tec Inc. 06 12 13 14 15 16 19 20 29
General Scientific Equipment Co. 10 11 26
Graham Company 25
Guildline Instruments Limited 20 26 29
H W Cowan Canada Ltd. 17 18
H.O. Trerice 21 26
H.O.P. Consulab Inc. 01 02 06 12 13 14 15 16 19 20 29
HCP Industrial Sales 25
Hankison Corp. 09
Hewlett Packard Canada Ltd. 06 18 26 29
Hoke Controls Ltd. 07 08 30
Honeywell Braukmann Inc. 02 21 26
Hy-Cal Engineering 04 09 22 26
IRD Mechanalysis Limited 27
Inproheat Industries Inc. 05
Industronics Inc. 05
Inficon Systems Ltd. 26 05 09 11 25
Infrascan Inc. 22 26
Instruments Champagne Int'l. 01 03 04 06 07 09 10 11 18 20 21 26 28 29
Intertechnology Limited 07 09 21 26
John C. Ernst Co. 07 21 26
Johnson Controls Ltd. 21
Kahlsico Int'nl. Corp. 03
Kahn and Company 11
Kalglo Electronics Co. Inc. 17
L-K Metal Products Co. Ltd. 01
Land Instruments Inc. 26
Leeds & Northrup Canada 01 05 06 07 09 12 13 14 15 16 19 20 29
Leonard Electric (1981) Limited 25
Leslie International 28
Levell Electronics Ltd. 06 18 29
Liquitrol Ltd. 21 26
Lisle-Metrix Ltd. 01 06 09 29
MCC Powers 09
MacDonald Process Equipment Ltd. 06 07 20 24 25 26
MacLeod & Grant Ltd. 05 23
Makinson Winchester Inc. 23
Manning Technologies Inc. 07
Margaux Controls Canada Inc. 17
Markko Construction 07
Markland Specialty Engineering Ltd. 07 28
Marsh Instrument Canada 21 26
Material Control, Inc. 14 15 16 25 26
Matheson 07 21
Maxon Corporation 07
Meriam Instrument 07 21
Mesam Limited 21 25
Metex Corporation Ltd. 07
Micronet Limited 14 15 16
Mikron Instrument Co. 26
Milton Roy Industries Ltd. 05 21
Multi-Amp Corp. 01 06 29
Neptune Meters 07 08 28 30
Newport Electronics 01 07 18 20 21 25 26 29
North American Mfg. Co. 05 07 21
Ohio Semitronics 02 14 16 19
Olman Instruments 01 06 17 18 19 25 27 29
Ontor 05 08 09 10
Ordan Thermal Products 02 05 07 08 14 15 16 19 21
PCB Piezotronics 27
PMC/Beta Corporation 27
Pacer Industries 01 06 09 11 17 18 25 26 29
Palmer Instruments 10 11 21 26
Peschel Instruments Inc. 29
Preico Electronics Ltd. 01 06 18 29
Preso Industries 07 08 24
Presto Tek 26 30
Promac Controls Inc. 07
RCC Electronics 01 06 17 18 19 25 29
Resource Interface 06 17
Reuter-Stokes Canada 03 09
Rexanne Products 18 22 25 26
Rockwell International of Canada 08 30
Rosemount Analytical 07
S.L. Watkins & Assoc. 23
Sentry Equipment 30
Serfilco 02
Shortridge Instruments 07
Singer Company of Canada 07 08 21 30
Sirco Products 07
Soget 07
Solidyne 14 15
Sommers Motor General or Sales 01 02 06 14 15 16 19 25 29
Standard Equipment Co. 04 22 23 26
Tekelek 26
Tel-Tru Manufacturing 26
The Electric Tachometer Corp. 01 06 09 11 25 26 29
Thermal Energy Devices 26
Thermax Canada 01 29
Thermo Electric (Canada) 20 26
Transmation Canada 01 06 10 11 16 17 18 19 25 29
Uehling Instrument 21
United Electric Controls (Canada) 20 21 26
Utility & Industrial Supply 07 21
Valera Electronics 26
Vallance Brown 01 06 18 25 29 30
Veeder-Root of Canada 07 08 25 30
Veronics Instruments 07 09 11
Vibron 27
Vitec 27
Viz Manu. 01 18 29
Wahl International 26
Water Refining 30
Weed Instrument Company, Inc. 26
Weiss Instruments 21 26
West Instrument 01 07 24 26
Westinghouse Canada 01 02 05 06 07 12 13 14 15 21 29
Wilgood 04 07 24 30
Willer Engineering 03 05 07 09 11 21 25 26
Winter's Thermogauges 10 11 21 26
York Instruments 09 11 20 25 26 29
Zero-Max 25

Contrôleurs

01 Combustion
02 Charge électrique
03 Fuites de vapeur

AMF/Paragon Electric Division 02
Alexander D. Smart Ltd. 03
Analygas Systems Ltd. 01
Automatic Controls Systems 02
Beckman Instruments, Inc. 01
Cleveland Controls Inc. 01
Comalco Ltd. 02
Conserval Engineering Inc. 01 02
Control Devices 02
Douglas Power Equipt. Ltd. 02
E.A. Electric 02
ERDCO Engineering Corp. 01
Electromatic Components Ltd. 02
Empire Controls 02
Energy Management Corp. 02
Energy Systems Inc. 01
Extech Systems 01
Gen-Tec Inc. 02
H.O.P. Consulab Inc. 02
Hewlett Packard Canada Ltd. 01 02
Honeywell Ltd. 02
Industronics Inc. 01
Inficon Systems Ltd. 01
Inproheat Industries 01
Johnson Controls Ltd. 02
Leeds & Northrup Canada 01 02

Chapitre 9

Margaux Controls Canada Inc. 02
Micronet Limited 02
Milton Roy Industries Ltd. 01
Modudata Systems Ltd. 02
North American Mfg. Co. 01
Olman Instruments 02
Ordan Thermal Products 01 02
P.S.C. Controls 02
Pacer Industries 02
Pro Controls 02
Rantach Electronics 02
S.L. Watkins & Assoc. 03
Scientific-Atlanta 02
Solidyne 02
Synerco Systems For Energy Conservation 02
Teledyne Analytical Instr. 01
Tervcon 01
The Electric Tachometer Corp. 02
Thermax Canada 02
Thermolec 02
Thermolec Ltd. 02
Time Mark 02
U.E. Systems 03
Wahl International 03
Westinghouse Canada 01 02
Willer Engineering 01

Senseurs

01 Gaz carbonique
02 Monoxyde de carbone

Acme Engineering Prod. Ltd. 01 02
Analygas Systems Ltd. 01 02
Beckman Instruments, Inc. 01 02
Canadian Applied Technology 02
Conserval Engineering Inc. 02
Corning Glass Works 01
Energy Management Corp. 01
Energy Management Systems 01 02
Energy Systems Company 02
Enmet Canada Ltd. 02
Extech Systems 01 02
General Scientific Equipment Co. 02
Inficon Systems Ltd. 01 02
Levitt-Safety Limited 02
Matheson 01 02
Measurex Inc. 01 02
Ordan Thermal Products 01 02
Rosemount Analytical 01 02
Safety Supply Canada 02
Teledyne Analytical Instr. 01 02
Willer Engineering 01 02

Équipement de test

01 Étachéité à l'air
02 Combustion
03 Électricité
04 Isolation
05 Purgeurs à vapeur

Can-an Instruments Ltd. 01 03 05
A-Tech Moisture Surveys 04
Airflow Developments (Cda) Ltd. 01
Alexander D. Smart Ltd. 05
Ametek, Inc., Thermox Instruments Div. 02
Analygas Systems Ltd. 02
Associated Research, Inc. 03 04
Bach-Simpson Ltd. 03 04
Baker Instruments Limited 01 02
Beckman Instruments, Inc. 02 04
Can-Am Air Leakage Control Systems 01
Centri-spray Corp. 01
Criterion Instruments Ltd. 03 04
Datron Systems Inc. 05
Duncan Instruments Ltd. 03
Dwyer Instruments Inc. 02
EEV Canada Ltd. 04
Empire Controls 03
Ener-Corp Management Limited 01
Escodyne Ltd. 05
Extech Systems 02
FTS Systems, Inc. 03
Furnaco Industrial Supplies & Instr. Co. Ltd. 02
GTE Products Corp. 03
Gen-Tec Inc. 03
Guildline Instruments Limited 03
H W Cowan Canada Ltd. 03
Hewlett Packard Canada Ltd. 03 04
IDI Electric (Canada) Ltd. 03
Inficon Systems Ltd. 02 05
Infrascan Inc. 04 05
Leeds & Northrup Canada 03
Levell Electronics Ltd. 03 04
Makinson Winchester Inc. 05
Metropolitan Refining Co. Inc. 02
Mikron Instrument Co. 05
Milton Roy Industries Ltd. 02
Multi-Amp Corp. 03 04
North American Mfg. Co. 02
Ohio Semitronics 03
Olman Instruments 03
Ontor 02
Ordan Thermal Products 02 03 04
Pacer Industries 03 04
Peschel Instruments Inc. 03 04
Power/Mate Corp. 03
Promac Controls Inc. 03
RCC Electronics 03 04
RFL International 03
Rexarne Products 05
Rochester Instrument Systems 03
S.L. Watkins & Assoc. 01 05
Schlegel Canada 01
Standard Equipment Co. 01 04 05
Sugar Hut Hill Holdings 01 02 03 04 05
Tervcon 02
Thermal Energy Devices 04
Thermidaire Corp. (1974) 05
Toyoda America 05
Transmation Canada 03
U.E. Systems 05
Utility & Industrial Supply 05
Wahl International 05
Westinghouse Canada 02 03
Willer Engineering 02

Équipement thermographique

AGAtronics Ltd.
Airflow Developments (Cda) Ltd.
Baker Instruments Limited
Infrascan Inc.
Standard Equipment Co.
Sugar Hut Hill Holdings
Thermal Energy Devices
Wahl International
Willer Engineering

Minuteries

01 Électroniques
02 Mécaniques
03 Portatives

D.J. MacAulay & Assoc. 01 02 03
ADMIC Controls 01
AMF/Paragon Electric Division 01
ASEA Ltd. 01
American Stabilis, Inc. 01
Anbak Sales Canada Ltd. 01
Canadian General Electric 01 02
Comeau Technique Ltd. 01
Conserval Engineering Inc. 01 02
Contric Automation Ltd. 01
Electromatic Components Ltd. 01
Energy Management Corp. 01 02
Gen-Tec Inc. 01
Hewlett Packard Canada Ltd. 01
Honeywell Braukmann Inc. 01 02
Instrumentation & Control Systems Inc.
Instruments Champagne Int'l. 01 03
Intralec 01 02
Isolation Systems 01
Klockner Moeller Ltd. 01
Lisle-Metrix Ltd. 01 02
M.H. Rhodes 02 03
Multi-Amp Corp. 01 03
Newport Electronics 01
Olman Instruments 02
Promac Controls Inc. 01
Siemens Electric 01 02
Simplex Int'l Time Eq. 01
Solar Centre 02
Synerco Systems For Energy Conservation 01 02
Texas Instruments 01
The Electric Tachometer Corp. 01 03
Trimax Controls 01
Valera Electronics 01
Vaeder-Root of Canada 01 02
Wahl International 03
Westinghouse Canada 01

Chapitre 10

Compresseurs et turbines

Les compresseurs

Les compresseurs d'air, grandement utilisés dans les usines, consomment considérablement d'énergie (environ 5 à 6kW par mètre cube par minute [20 à 25 hp par pi^3/min]). Il y a deux types principaux de compresseurs: *rotatifs* et *à piston.*

La capacité doit correspondre aux besoins

Comme la capacité du compresseur doit correspondre aux besoins, il faut d'abord déterminer la pression requise par le système. Le compresseur doit ensuite être réglé pour fournir la pression minimale répondant aux exigences. On devrait aussi vérifier la tuyauterie pour s'assurer qu'aucune modification au système, au cours des années, n'a entrainé de chutes de pression.

Charge minimale

Dans les usines où on utilise plusieurs compresseurs, on devrait chercher à en régler le plus grand nombre possible au niveau de charge minimale, gardant une unité pour charger, décharger ou équilibrer le système selon les besoins. Au fur et à mesure de la baisse de demande de pression, les unités devraient s'arrêter de fonctionner après une certaine période de décharge et ne devraient pas fonctionner, déchargées. Certains *systèmes de contrôle* effectueront ces fonctions automatiquement. Ils peuvent ausi être programmés pour tenir compte de l'efficacité relative des divers compresseurs. Si un système à haute pression exige peu d'énergie, un compresseur local pourra réduire de façon significative la pression totale du système. Un système indépendant pour outils pneumatiques, s'il est libre d'huile et d'humidité, pourra améliorer les économies d'énergie et, par le fait même, augmenter le rendement du système.

D'habitude, le système indépendant peut fonctionner à basse pression, permettant l'arrêt du système principal lorsque seuls les outils pneumatiques sont utilisés.

À charge partielle, les compresseurs à vis rotative sont habituellement moins efficaces que les compresseurs à piston. Ils devraient donc être soit fermés, soit chargés à plein.

Les fuites

Les fuites d'air comprimé devraient être immédiatement réparées car elles représentent une cause principale de gaspillage d'énergie.

Récupération de la chaleur

Les compresseurs génèrent beaucoup de chaleur. Celle-ci pourrait être récupérée et utilisée ailleurs. Il existe plusieurs *systèmes de récupération de la chaleur* pour les compresseurs refroidis à air. L'air réchauffé servira au chauffage d'une pièce, de l'air d'admission ou au séchage.

La récupération de la chaleur des compresseurs refroidis à l'eau se fait simplement par réarrangement de la tuyauterie, amenant l'eau réchauffée à un autre point de l'édifice.

Chapitre 10

Les turbines sont utilisées pour créer un système total de cogénération permettant la production à la fois d'électricité et de chaleur à partir d'une source unique.

Turbines à vapeur et à gaz

Les *turbines à vapeur* ont l'avantage de pouvoir utiliser pratiquement tout combustible. Elles sont efficaces à charge réduite et fonctionnent sur une plage variée de pressions de vapeur. Cependant, elles requièrent une grande centrale d'alimentation et des pressions de vapeur supérieures aux besoins normaux des procédés industriels. Il y en a deux types principaux: les turbines à contre-pression et les turbines à un ou deux étages.

Les *turbines à gaz* sont habituellement assemblées en usine et livrées sur les lieux, prêtes à être reliées au circuit d'alimentation en combustible, au système d'alimentation électrique et à l'équipement ou au procédé utilisant la chaleur. Dans l'industrie, la turbine à gaz n'offre un rendement économique que si l'électricité et la chaleur générées peuvent être utilisées efficacement. Ceci vaut pour tout système de cogénération.

Liste des produits

Compresseurs

01 Très efficaces (Le fournisseur indiquera le degré d'efficacité)
02 Modifications visant à améliorer
03 Surpresseurs (refroidis à air)

APE Canada Inc. 01
Haskel Inc. 03
Ingersoll-Rand Canada Inc. 01 02
Kahn and Company 01
Siemens Electric 01
Sihi Pumps 01
Solar Turbines Canada 01
Valv-All Canada 01

Turbines

01 Turbines très efficaces
02 Modifications visant à améliorer l'efficacité

ASEA Ltd. 01
BBC Brown Boveri Canada Inc. 01
Canadian Schack Ltd. 02
Haskel Inc. 00
Hayward Tyler 01
Ingersoll-Rand Canada Inc. 01 02
John Brown Engineering 01
Prochem 01
Siemens Electric 01
Sihi Pumps 01
Solar Turbines Canada 01 02
Westinghouse Canada 01 02
Worthington 01

Chapitre 11

Gestion des ressources hydrauliques

Transporteurs d'énergie

L'eau est une source principale d'énergie pour les industries et les systèmes de climatisation de tout genre d'édifices. C'est le véhicule le plus courant de transport d'énergie à travers la plupart des usines de traitement. Économiser cette ressource et assurer son *traitement* pour en tirer une utilité maximale sont critiques à tout programme d'économie d'énergie.

Quatre principaux points sont à considérer: *l'eau d'arrivée, l'eau d'alimentation des chaudières, l'eau des refroidisseurs* et *l'effluent*.

Traitement de l'eau d'arrivée

Voici les points à surveiller pour l'eau d'arrivée: la qualité de l'eau; les fluctuations dans la qualité; le *ph optimal; les variations de température et de courant*; les *dépôts boueux*; l'*équipement filtrant et les dispositifs d'amenée des produits chimiques*.

Les chaudières

Dans les usines, l'équilibre eau/vapeur est très important; on recommande d'établir une table des coûts relatifs de traitement, de pompage et de chauffage. La *récupération des condensats* est un facteur important dans l'économie de l'énergie hydraulique.

Il est donc essentiel de protéger la chaudière pour assurer une production maximale d'énergie et une utilisation maximale des produits chimiques; une telle combinaison apportera une plus grande quantité d'énergie à des coûts réduits d'opération.

Eau de refroidissement et eaux usées

On devrait considérer la réutilisation de l'eau de refroidissement et des eaux usées. Ceci représente une alternative aux pratiques actuelles d'évacuation.

Dans plusieurs usines, on achète l'eau pour les systèmes de refroidissement et, dans certains cas, on doit même payer pour évacuer cette eau dans les égoûts. C'est alors que les tours de refroidissement s'avèreront plus économiques que les systèmes à écoulement unique. Il y a trois types principaux de tours: tour à pulvérisation, tour à tirant naturel et *tour à tirage mécanique*. Ce dernier type est le plus courant et est maintenant très développé.

L'effluent

Dissiper les chaleurs perdues à l'aide de tours de refroidissement est souvent très dispendieux. Il sera peut-être plus économique de récupérer directement les chaleurs perdues pour les utiliser à d'autres points de traitement. Ce mode pourra non seulement fournir une source d'énergie à faible coût mais aussi alléger les charges frigorifiques.

Chapitre 11

Commerces et institutions

Dans les édifices commerciaux et les institutions, il existe plusieurs façons d'économiser l'énergie en conservant l'eau utilisée comme transporteur d'énergie. Voici quelques méthodes courantes:

(a) *robinets et douches à écoulement réduit*, pour conserver plus d'eau chaude;
(b) robinets à débit limité, réduisant le volume d'eau à chaque utilisation;
(c) *chauffe-eau électronique* (au point d'écoulement), ne chauffant que le volume d'eau nécessaire (pour se laver les mains, par exemple).

On peut aussi économiser l'eau dans les toilettes publiques en installant des *cabinets à chasse d'eau réduite* et des chasses manuelles aux urinoirs, plutôt qu'un système automatique.

Liste des produits

Gestion des ressources hydrauliques

01 Contrôles de stations de pompage
02 Charbon activé—pour l'eau potable
03 Commande informatisée de chasse d'eau pour les urinoirs
04 Tours de refroidissement (utilisant peu d'énergie)
05 Refroidisseurs à circuit fermé
06 Filtres à eau industriels
07 Séparateurs d'eau industriels
08 Traitement de l'eau
09 Pompes centrifuges
10 Gestion en général
11 Réservoirs de pression
12 Cartouches uniservice
13 Systèmes de niveau des liquides
14 Pommes de douche à faible débit
15 Toilettes à chasse réduite
16 Réducteurs de débit de robinet
17 Chauffe-eau instantanés

ADMIC Controls 01
Atkemix Inc. 02
Automatic Controls Systems 03
Baltimore Aircoil of Canada 01 04 05 06 07
Betz Inc. 08
Bristol Aerospace Ltd. 10
Buckman Laboratories of Canada Ltd. 08
Canadian Applied Technology 01
Control Devices 01
Culligan of Canada 08
Filterite/Brunswick Tech. Div. 11 12
Great North Conservation Products Inc. 15
Illinois Water Treatment Company **08**
International Water Saver Inc. 15
Liquiflame 08 06
Peel Energy Management 14 15 16
Progressive Equipment **01**
Rada Mechanical Products 01
Resources Conservation Co. **10**
Rock Master 10
Schramm 8 10
Skan-A-Matic 13
Star Systems 06 07 08 10
Water Conditioning Canada 06 08 10
Water Refining 06 08 10
Wetcom Engineering 08
Wilcorp Mfg. 17
Wilgood **10**

Fournisseurs de produits d'économie d'énergie

A

A-Tech Moisture Surveys P.O. Box 105 Manotick Ontario K0A 2N0 (613) 692-2166 Succursales: P.O. Box 3662 Halifax Nouvelle-Écosse B3J 3K6 (902) 429-9632 400 Bute St. Lambert Quebec J4R 2M2 (514) 671-1250 6679 Shelter Bay Road, Unit 70 Mississauga Ontario L5N 2A2 (416) 821-3015 1918 Wyandotte Street East Windsor Ontario N8Y 1E4 (519) 252-8051 851 Lagimodiere Blvd. Winnipeg Manitoba R2J 3K4 (204) 247-5744

A.W. Cash Valve Mfg. Corp. 666 E. Wabash Decature IL. USA 62525 (217) 422-8574 Représentants: **Tom Donaldson Co. Ltd.** 20 East 4th Ave. Vancouver C.-B. V5T 1E8 (604) 873-4628 **Lytle Engineering Specialties** 6445 boul. De Maisonneuve ouest Montreal Quebec H4B 2Z1 (514) 487-7820

AAF-Ltd. 400 Boulevard Stinson Montreal Quebec H4N 2G1 (514) 748-6931 Succursales: 6 Heritage Drive S.E., #L4 Calgary Alberta T2H 2B8 387 Princess Avenue London Ontario N6B 2A7 55 Chandler Crescent Moncton Nouveau-Brunswick E1E 3W6 5445 boul. Henri-Bourassa ouest Montreal Quebec H4R 1B7 34 Grenfell Crescent Ottawa Ontario K2G 0G2 2700, boul. Laurier, #511 Québec Québec G1V 2L8 215 Milvan Drive Toronto Ontario M9L 2A3 1810 Alberni Street Vancouver C.-B. V6G 2L6 1122 Wall Street Winnipeg Manitoba R3E 2R9 Agents: **M & M Engineering Limited** Halifax Nouvelle-Écosse St-Jean Terre-Neuve **Kemo Products Limited** Thunder Bay Ontario

Abisko Mfg. Inc. 4 Buckingham Street Toronto Ontario M8Y 2W1 (416) 259-3264

Accessible Products Company 2122 West 5th Place Tempe AZ 85281-9990 (602) 967-8888 Représentant: **J. Douglas Smith** 1310 Echo Road Sarnia Ontario N7S 3K3 (519) 542-7311

Acme Engineering Prod. Ltd. 5706 Avenue Royalmount Montreal Quebec H4P 1K5 (514) 342-5656

ACS-Hovac 935 N Lively Woodale Ill. 60291 (312) 860-6860

Acwil Insulations Limited 80 Signet Drive Weston Ontario M9L 1T2 (416) 741-7311

Adalet-PLM 4801 West 150th St. Cleveland Ohio 44135 (216) 267-9000 Succursales: **Iberville Div.** 100 Longtin Saint-Jean Quebec J3B 3G5 (514) 347-2304 **GTE Sylvania Ltd. Leonard Elec. Ltd.** 1008 Rangeview Rd. Mississauga Ontario L5E 1H3 (416) 274-3454

ADMIC Controls 2-33 Glencameron Rd. Thornhill Ontario L3T 1N9 (416) 881-4112

ADT Energy Systems Ltd. 5734 Yonge St. Willowdale Ontario M2M 3T3 (416) 226-9221

Aero Environmental Limited 37 Hanna Avenue Toronto Ontario M6K 1X2 (416) 366-7431

Aerofin Corp. (Canada) Ltd. Hebert St. Gananoque Ontario (613) 382-3535 Succursales: 7493 Autoroute trans-canadienne bureau 104 Ville St Laurent H4Y 1T3 (514) 336-8344 85 Ellesmere Rd. #208 Scarborough Ontario M1R 4B8 (416) 449-2811

Aeroquip (Canada) Inc. 287 Bridgeland Ave. Toronto Ontario M6A 1Z7 (416) 781-5261

Aerovent Inc. 1 Aerovent Drive Piqua Ohio 45356 (513) 773-4611 Succursale **Powlesland Engrg. Ltd.** 23 Westmore Dr. Su. 400 Rexdale Ontario M9V 3Y7 (416) 745-0311

AGAtronics Ltd. 5230 South Service Rd., Ste. 125 Burlington Ontario L7L 5K2 (416) 637-5696

Ainsworth Electric 131 Bermondsey Road Toronto Ontario M4A 1X4 (416) 751-4420

Air Changer Company Ltd. 334 King Street East, Suite 505 Toronto Ontario M5A 1K8 (416) 863-1792

Air Economy Corp. P.O. Box 29 Flemington N.J. 08822 (201) 782-8888

Airflow Developments (Cda) Ltd. 1281 Matheson Blvd. Mississauga Ont. L4W 1R1 (416) 624-2133 TELEX 06-960332

Airtechil Inc. 9200 Charles de Latour Montreal P.Q. H4N 1M2 (514) 336-3399

Alberta Industrial Development Ltd. 704 Cambridge Bldg. Edmonton Alberta T5J 1R9 (403) 429-4094

Albion 2195 Avenue Ekers Montreal Quebec H3S 1C7 (514) 731-3241 Succursales: 32 Colville Road, Toronto Ontario M6M 2Y4 (416) 249-8533 2725 Lake City Way Burnaby C.-B. V5A 2Z6 (604) 420-1124

Alcan Building Products P.O. Box 269 Toronto Dominion Centre Toronto M5K 1K1 (416) 366-7211 Succursales: 620 Audley Blvd. Annacis Industrial Estate New Westminster C.-B. (604) 526-0828 962 Laval Crescent Kamloops B.C. V2C 5P5 (604) 372-9317 2239 McGarrigle Road Nanaimo. C.-B. V9S 4M5 (604) 758-2445 2695 Opie Crescent Prince George C.-B. V2N 2K9 (604) 562-5541 675 Willow Park Road Kelowna C.-B. V1X 5H9 (604) 765-3131 6680 Mirah Road R.R. 3 Victoria C.-B. V8X 3X1 (604) 652-3901 3504 - 80th Ave. S.E. Calgary Alberta T2C 1J3 (403) 279-5536 7735 Wagner Road Edmonton Alberta T6E 5B1 (403) 465-5246 #3, 7819 - 50th Ave. Red Deer Alberta T4P 1M8 (403) 343-7275 Bay #1 805 56th St. E. Saskatoon Saskatchewan (306) 665-2611 120 McLevin Avenue Scarborough Ontario M1B 3E9 (416) 293-1981 750 Barmac Drive Weston Ontario M9L 2X8 (416) 745-6133 Highway 4 at 401 P.O. Box 1300 Lambeth Ontario N0L 1S0 (509) 652-3246 1110 Dearness Drive London Ontario N6E 1N9 (519) 681-2870 8 Cesar Avenue Ottawa Ontario K2G 0B2 (613) 226-1366 578 Falconbridge Rd. (P.O. Box 2370) R.R. 1 Sudbury Ontario P3A 4R7 (705) 560-0315 428 Millen Road Stoney Creek Ontario L8E 3N9 (416) 561-1424 379 Gage Avenue Kitchener Ontario (519) 744-8171 40 Bell Farm Units 2 & 3 Barrie Ontario L4M 5L3 (705) 737-1064 650 Victoria St. Building C, Units 14 & 15 Box 1136 Cobourg Ontario K9A 4W5 (416) 372-8734 1486 Church Avenue Winnipeg Manitoba R2X 1G4 (204) 633-8429 Directeur 9701 boul. Louis H. Lafontaine Ville d'Anjou Quebec H1J 2E6 9155 Charles-de-Latour Montreal Quebec H4N 1M3 (514) 384-0490 2565 rue Watt Parc Colbert Ste. Foy Quebec G1P 3T2 (418) 658-1204 2389 rue Hertel Sherbrooke Quebec J1J 2J1 (819) 567-6655 425 Edinburgh Drive Moncton N.B. E1E 2L2 (506) 855-0492 10 Ilsley Burnside Industrial Park Dartmouth N.-É. B3B 1L3 (902) 466-7174

Alexander D.Smart Ltd. 351 Steelcase Rd. W. Unit #3, Markham Ontario L3R 4H9 (416) 474-0550 Représentants: 3300 boul. Cavendish bureau 150 Montreal Quebec H4B 2M8 (514) 481-1104 TELEX 055-66316 Suite 100, 620 - 67th Avenue S.W. Calgary Alta. T2V 0M2 (403) 255-0605 TELEX 03-824568 (Alegre) 444 Robson Street Vancouver C.-B. V6B 2B5 (604) 879-3033 TELEX 04 507672

Alfa-Laval Ltd. 113 Park St. S. Peterborough Ont K9J 3R8 (705) 745-5735 TELEX 06-962811 Succursale: 7005 boul. Taschereau Brossard Que. J4Z 1A7 (514) 735-5161

All Glass Inc. 45 Esna Pk. Drive Markham Ontario L3R 1C9 (416) 475-3100

Allen-Bradley Canada Limited 135 Dundas Street Cambridge Ontario N1R 5X1 (519) 623-1810 Succursales: 100 Windmill Road Dartmouth N.É. B3B 1L7 (902) 463-1180 & 463-1185 TELEX 019-31493 P.O. Box 306 Moncton Nouveau-Brunswick E1C 8L4

Fournisseurs

(506) 386-5263 25 Carlton Drive Mount Pearl T.-N. A1N 2X4 (709) 368-1931 605 Avenue Marshall Dorval Quebec H9P 1E1 (514) 636-6220 TELEX. 05-822517 795. Ave. St. Jean-Baptiste, bureau 104 Les Saules Quebec G2E 5E8 (418) 871-5455 TELEX 051-34504 1277 avenue Coté, App. #161 (418) 545-6137 TELEX 051-36124 P.O. Box 8115 Ottawa Ontario K1G 3H6 (613) 728-3355 43A Lesmill Road Don Mills Ontario M3B 2T8 (416) 445-3740 TELEX 06-966-782 4346 Elmview Dr., P.O. Box 760 Hanmer Ontario P0M 1Y0 (705) 969-7655 3425 Harvester Road Burlington Ontario L7N 3N1 (416) 632-7711 TELEX 061-8851 135 Dundas Street Cambridge Ontario N1R 5X1 (519) 623-1810 & 653-4051 TELEX 069-59317 704 Fanshawe Park Road London Ontario N5X 2B9 (519) 672-9061 4080 E.C. Row Ave. East, Unit 11 Windsor Ontario N9A 6J3 (519) 944-4112 TELEX 064-77883 Unit 34, 1313 Border Street Winnipeg Manitoba R3H 0X4 (204) 633-3914 & 633-3915 TELEX 07-55331 613 Castlegreen Drive Thunder Bay Ontario P7A 7M2 (807) 767-8462 C11-6215 - 3rd Street, S.E. Calgary Alberta T2H 2L2 (403) 253-1020 Telex 03-826512 202-11434 - 168 Street Edmonton Alberta T5M 3T9 (403) 451-2093 TELEX 037-41511 P.O. Box 7830 Saskatoon Saskatchewan S7K 4R5 (306) 242-2100 TELEX 074-2368 12 East Third Avenue Vancouver C.-B. V5T 1C3 (604) 879-8671 TELEX 04-53136

Allied Witan Co. 13805 Progress Parkway Cleveland Ohio 44133 (216) 237-9630 Distributeurs: **John Spotton Company Limited** 3211 Lenworth Drive Mississauga Ont. L4X 2G6 (416) 625-6400 TELEX 06-961109 **Cow per Company Limited** 677 7e Avenue La-Chine Montreal H8S 3A1 (514) 637-6746 TELEX 05-821827

Alumicor Limited 180 Commander Blvd. Agincourt Ontario M1S 3C9 (416) 291-7135

American Coolair Corp P.O. Box 2300 Jacksonville Floride USA 32203 (904) 389-3646 Représentants: **Davie Environmental** 25 Kelfield St. Rexdale Ontario M9W 5A1 (416) 244-5586 **Airobec Inc.** C.P. 37 Succ. Jean-Talon Montreal Quebec H1S 2Z1 (514) 354-3114

American Stabilis, Inc. P.O. Box 1289. Industrial Park Lewiston ME 04240 (207) 784-9389 Distributeurs **B.D. Wait Co., Ltd.** 430 Wyecroft Rd. Oakville Ontario L6K 2G9 (416) 844-3224

American Standard Industrial Prod. Div. One Blair Drive Bramalea Ont. L6T 2H4 (416) 457-2881 Succursales: 327 Market Mall 4935-40th Ave. N.W. Calgary Alb. T3A 2N1 (403) 286-1771 655 Hodge Montreal Quebec H4N 2A3 (514) 747-7517 6537 Mississauga Rd Mississauga Ontario L5N 1A6 (416) 821-2335

Ametek Inc. Schutte & Koerting 2233 State Road Cornwells Heights PA USA 19020 (215) 639-0900 Représentants: **B. Guthrie Engineering Co. Ltd.** 1381-3 Hastings Crescent S.E. Calgary Alberta T2G 4C8 (403) 287-2483 & 287-2484 TELEX 038-21763 **B. Guthrie Engineering Co. Ltd.** 5905-103rd Street Edmonton Alberta T6H 2H3 (403) 434-8461 TELEX 037-2613 **Axel Johnson Industries Ltd.** Process Equipment Division 1475 Boundary Road Vancouver Colombie-Britannique V5K 4V2 (604) 291-2341 TELEX 04-354532 **Brian Engineering Limited** 1746 St. James Street Winnipeg Manitoba R3H 0L3 (204) 632-5516 TELEX 07-55500 **Brian Engineering Limited** 99 Rocky Lake Drive Bedford Nouvelle-Écosse B4A 2T3 (902) 835-8322 TELEX 019-22874 **Brian Engineering Limited** 330 Manitou Drive Kitchener Ontario N2C 1L3 (519) 893-7474 TELEX 069-55234 **Brian Engineering Limited** 45 Shaft Road Rexdale (Toronto) Ontario M9W 4M3 (416) 248-0226 TELEX 06-989331 **Brian Engineering Limited** 880 Philip Street Sarnia Ontario N7T 1Z6 (519) 337-7591 TELEX 064-76143 **Brian Engineering Limited** 735 Harold Crescent hunder Bay Ontario P7C 5H8 (807) 623-2155 TELEX 07-34689 **Brian Engineering Limited** 2445 Route Duncan Montreal Quebec H4P 2A2 (514) 735-1671 TELEX 055-60764 **B. Guthrie Engineering Co., Ltd.** 2231 Broad Street Regina Saskatchewan S4P 1Y7 (306) 352-2292 TELEX 071-2792 c/o TAS **B. Guthrie Engineering Co., Ltd.** P.O. Box 1720 Saskatoon Saskatchewan S7K 3S1 (306) 242-8295 TELEX 074-2731

Ametek, Inc., Thermox Instruments Div. 150 Freeport Road Pittsburgh PA 15238 (412) 828-9040 Représentants **Galvanic Analytical Systems** P.O. Box 8550 Postal Station F Calgary Alberta T2J 2V6 (403) 253-6576 TELEX 03822667 **G A S Cgy F. Drexel Western Ltd.** 4084 McConnell Court Burnaby C.-B. V5A 3N7 (604) 420-2443 TELEX 04-354852 **F. Drexel Western Ltd.** 1846 Quinn Street Prince George C.-B. V2N 1X5 (604) 564-7807 TELEX 04-788612 **Willer Engineering Ltd.** 1179 boul. Décarie Ville St. Laurent Montreal Quebec H4L 3M8 (514) 748-6169 TELEX 05-825599 Willer Eng. **Mtl. Willer Engineering Ltd.** 422 Consumers Rd. Willowdale Ontario M2J 1P8 (416) 499-4421 TELEX 06-968816

AMF/Paragon Electric Division 52 Royal Rd. Guelph Ontario N1H 7H1 (519) 822-1576/Toronto 364-0053

Amprobe Instrument 630 Merrick Rd. P.O. Box 329 Lynbrook NY 11563 (516) 593-5600 Représentants: **Atlas Electronics Ltd.** 50 Wingold Ave. Toronto Ontario M6B 1P7 (416) 789-7761

Analyges Systems Ltd. 215 Nantucket Blvd. Scarborough Ontario M1P 2P2 (416) 759-2241

Analytical Measurements of Canada Ltd. (416) 749-7179

Anbak Sales Canada Ltd. 3208 Lenworth Dr. Mississauga Ontario L4X 2G2 (416) 625-1061

Andover Controls Corp. York & Hauerhill Sts. Andover MA USA 01810 (617) 470-0555 Distributeur: **Energy Management Systems** Unit 7B 1585 Britannia Rd. E. Mississauga Ontario L4W 1S5 (416) 677-6740

APE Canada Inc. 2333 Millrace Court - Unit 4 Mississauga Ontario L5N 1W2 (416) 821-1300

Appareils D'eclairage York 1320 boul. Jules Poitras Ville St. Laurent P.Q. H4N 1X7 (514) 334-7850

Appleton Electric Ltd. 750 Lawrence Street Cambridge Ontario N3H 2N1 (519) 653-2581 Succursales: Halifax (902) 434-3229 Quebec (418) 522-0643 Montreal (514) 937-0190 Cambridge (519) 653-2581 Toronto (416) 456-3925 Hamilton (416) 523-7033 Pager R-4728 London (519) 653-0368 Pager R-5166 Sudbury (705) 693-2066 Winnipeg (204) 772-2129 Edmonton (403) 452-8414 Calgary (403) 269-9373 Vancouver (604) 224-7395

Appropriate Technology Corp. P.O. Box 975 Brattleboro UT 05301 (802) 257-4501 Distributeur: Canadian Gem Instr. 3060 Lakeshore Rd. W. Oakville Ontario (416) 827-6446

Armstrong International, Inc. 816 Maple Street Three Rivers MI 49093 U.S.A. 49093 (616) 273-1415 Représentants: **General Equipment Ltd.** Calgary Edmonton Vancouver Saskatoon Winnipeg **Preston, Phipps Equipment Ltd.** Dartmouth Toronto Sarnia Ottawa Preston, **Phipps Inc.** Montreal Ste. Foy

Arthur S. Leitch Company Ltd. 999 William Street Midland Ontario L4R 4L7 (705) 526-5496 Succursale: a/s de Conval Quebec Incorporated 3115 Rue Sarteion St. Laurent P.Q. H4R 1E7 (514) 332-2301 Agents: **Kemo Products Limited** P.O. Box 266, Station "F" 611 Squier Street Thunder Bay Ontario P7C 4V8 (807) 344-6657 TELEX 073-4356 **E.D. Brown & Associates** 204 Starlite Building 7071 Bayers Road Halifax Nouvelle-Écosse B3L 2C2 (902) 455-8294 TELEX 019-21847 **J.F. Taylor Enterprises Limited** P.O. Box 3369, Station "B" 380 Ridge Row St-jean Nouveau-Brunswick E2M 3Z9 (506) 672-3216 TELEX 014-47494 **Pompes Industrielles St-Foy Inc.** 1792 Boulevard Hamel Duberger Quebec G1N 3Z2 (418) 681-7301 TELEX 051-31741 **Hugh J. O'Neill Company Limited** Box 1270 34 Elm Street South Timmins Ontario P4N 7J7 (705) 264-2337 TELEX 027-77137 3090 Jarrow Avenue Mississauga Ontario L4X 2C7 (416) 625-3551 TELEX 06-961163 38 Cramer Drive Nepean Ontario K2H 5X5 (613) 828-3733 TELEX 053-4588 Représentants: **Bruce St. C. Patrick Ltd.** 2490 Blenheim Street Vancouver C.-B. V6K 4K3 (604) 731-6596 TELEX 04-54345 **Kehoe Equipment Limited** 10571-114th Street Edmonton Alberta T5I 2P1 (403) 420-0040 TELEX 037-43267 **BO Corp Supply Limited** 7058 D Farrell Road S.E. Calgary Alberta T2H 0T2 (403) 252-4274 **H.F. Clarke Limited** 1426 Erin Street Winnipeg Manitoba R3E 2S8 (204) 772-2584

ASCOLECTRIC Limited Airport Road, P.O. Box 160 Brantford Ontario N3T 5M8 (519) 756-5287 ou 364-2838 (Toronto Line) Succursales: 160-6450 Roberts Street Burnaby C.-B. V5G 4E1 (604) 294-1767 TELEX 043-56751 4208-12th Street, N.E. Calgary Alberta T2E 6K9 (403) 276-4459 TELEX 038-22787 10458 Mayfield Road, Suite 201 Edmonton Alberta T5P 4P4 (403) 483-5126 6537 Mississauga Road Mississauga Ontario L5N 1A6 (416) 821-2711 TELEX 061-81149 5500 Vanden Abeele Ville St. Laurent Montreal Quebec H4S 1P9 (514) 337-8520 TELEX 05-824006 P.O. Box 2548 Dartmouth East Post Office Dartmouth Nouvelle-Écosse B2W 4B7 (902) 434-2127 TELEX 019-22870

ASEA Ltd. 10,300 Henri-Bourassa ouest Saint-Laurent, Quebec H4S 1N6 (514) 332-5350

Associated Research, Inc. 8221 N. Kimball Ave. Skokie Ill 60076 (312) 647-7850 Agent: **Brunelle Instruments, Inc.** 826 Belvedere Sherbrooke Quebec J1H 4B8 (819) 569-1408

Aston Industries Inc. C P. 220 St-Leonard d'Aston Quebec J0C 1M0 (819) 399-2175

Aston Ziehl Motors Inc. 50 Cour-

Fournisseurs

chesne, C.P. 220 St-Leonard d'Aston Quebec J0C 1M0 (819) 399-2611

Atkemix Inc. P.O. Box 1085 Brantford Ont N3T 5T2 (519) 756-6181 & (416) 822-3630

Atlas Engineering & Machine Co. Ltd. 16 Eastern Ave. Toronto Ont. M5A 1H4 (416) 368-3003 Succursales: 245 Baig Blvd., P.O. Box 942 Moncton Nouveau-Brunswick E1E 1E1 (506) 388-4204 1184 Sanford St., P.O. Box 1662 Winnipeg Man. R3C 2Z6 (204) 786-6687 2569 De Minial St. Laurent Quebec H4S 1E5 (514) 332-4824 3143 Thunderbird Cres. Burnaby C.-B. V5A 3G1 (604) 937-7705

Atlas Polar Company Limited P.O. Box 160, Stn. 'O' Toronto Ontario M4A 2N3 (416) 751-7740

Autocon Industries, Inc. 2300 Berkshire Lane No. Minneapolis MN 55441 (612) 553-4818 Représentants: **Crescent Control Ltd.** 2960 West 4th Ave. Vancouver C.-B. V6K 1R4 (604) 732-7461 **Telcon Controls Ltd.** 12 Lockport Ave. Toronto Ont. M8Z 2R7 (416) 239-3167.

Automatic Controls Systems 8 Melanie Dr. Brampton Ontario L6T 4L2 (416) 791-1020

Automation Industries (Can) Ltd. 6860 Rexwood Rd. Mississauga Ont. L4V 1L8 (416) 678-9383

Aviation Electric Ltd. C.P. 2140 St. Laurent Quebec H4L 4X8 (514) 744-2811

Aztec Canada Ltd. 5678 Production Way Langley C.-B. V3A 4N4 534-6575

B

B.E.S. Energy Equipment 553 boul. Industriel St. Eustache P.Q. J7R 5R3 (514) 472-1035

Babcock & Wilcox Refractories 1185 Walkers Line North Burlington Ontario L7M 1L1 (416) 335-3414 Succursales: 207 boul. Brunswick Pointe Claire Quebec H9R 1A5 (514) 875-7080 10508-169th Street Edmonton Alberta T5P 3X6 (403) 483-4507

Bach-Simpson Ltd. 1255 Brydges St. London Ontario NAW 2C2 (519) 452-3200 Succursales: 415 Oakdale Rd., Suite 243 Downsview (416) 742-5151/2 Ottawa (613) 829-3828 5585 Monkland Ave., Suite 100 Montreal (514) 489-4966 TELEX 055-66341

Bacharach Instrument Company 301 Alpha Dr. Pittsburgh PA. 15238 (412) 782-3500 Distributeurs: **Canadian General Filters** 39 Crockford Blvd. Scarboro Ontario (416) 757-3691 **Fisher Scientific Ltd.** P.O. Box 9200 Terminal Ottawa Ontario K1G 4A9 (613) 225-6752

Bailey Controls 860 Harrington Court Burlington Ontario L7N 3N4 (416) 639-8840 Succursales: 880 Hanwell Road Fredericton Nouveau-Brunswick E3B 6A3 (506) 454-2400 2745 Dutch Village Road, Suite 209 Halifax Nouvelle-Écosse B3L 4G7 (902) 455-0574 209 Brunswick Pointe Claire (Montreal) Quebec H9R 1A5 (514) 694-5610 1499 Ave. Boivin Ancienne-Lorette Quebec G2E 4R1 (418) 871-2850 750 Gordon Baker Road Willowdale (Toronto) Ontario M2H 3B4 (416) 493-6803 1030 Upper James Street, Suite 302 Hamilton Ontario L9C 6X6 (416) 388-6720 39 Leacock Way Kanata (Ottawa) K2K 1T1 (613) 592-1278 5720 MacLeod Trail South, Suite 214 Calgary Alberta T2H 0J6 (403) 253-0271 10508-169 Street Edmonton Alberta T5P 3X6 (403) 483-4709 4050 Gravely Street, Suite 203 Burnaby (Vancouver) V5C 3T6 (604) 299-5748 3501-8th Street East Saskatoon Saskatchewan S7H 0W5 (306) 373-5444

Baker Instruments Limited 118 Doncaster Ave. Thornhill Ontario L3T 1L3 889-8642

Baldor Electric Co. Fort Smith Arkansas 72902 (501) 646-4711 Succursales: Dryden Agencies Ltd. 7228-76th Avenue Edmonton Alberta T6B 0B2 (403) 465-9594 TELEX 037-3454 **Canadian Electro Drives, Ltd.** 2242 Alpha Avenue Vancouver (Burnaby) C.-B. V5C 5L6 TELEX 04-354718 **Circle-Tronic** 1844 Rue William Montreal Quebec H3J 1R5 (514) 933-2711 TELEX 05-267355 **Industrial Agencies Ltd.** 301-310 Donald Street Winnipeg Manitoba R3B 2H4 (204) 942-5205 TELEX 07-55265 **John G. Rubino, Inc.** 6551 Mississauga Rd. Mississauga Ontario L5N 1A6 (416) 821-0944

Bally Refrigeration of Canada Box 696, 1365 California Ave. Brockville Ont. K6V 5V8 (613) 342-6115

Baltimore Aircoil of Canada 35 Sinclair Ave. Georgetown Ont. L7G 1J3 (416) 877-5272 Représentants: **H.E. Rieckelman (Canada) Ltd.** 2104 Bromsgrove Road Mississauga Ontario L5J 1L4 (416) 823-9440 **Aquavap Equipment Ltd.** 1485 Rue Bégin Ville St Laurent Quebec H4R 1V8 (514) 332-3120 TELEX 05-824505 **R.R. Burne Sales Limited** #1A 6020-11th Street S.E. Calgary Alberta T2H 2G1 (403) 252-0113 **G.R. Hudson Sales Limited** P.O. Box 94305 Richmond C.-B. V6Y 2A6 (604) 271-8555 **Airmaster Sales Limited** 400 Keewatin Street Winnipeg Manitoba R3E 3E9 (204) 633-5756 TELEX 07-587765 **Vortec Engineering Sales Limited** Sub 31 12-3012 Louise Street Saskatoon Saskatchewan S7J 3L8 (306) 373-3310 TELEX 07-42446

Banvil Limited 775 Main Street East Milton Ontario L9T 3Z3 (416) 878-8181 Succursales: Vancouver (604) 941-9491-2 Winnipeg (204) 633-9345 Montreal (514) 327-3783

Barber Industries P.O. Box 5280 Stn. 'A' 9625 Shepard Road S.E. Calgary Alberta T2H 2P3 (403) 279-7511 TELEX 038-25721

Barber-Colman of Canada Ltd. 1875 Wilson Ave. Weston Ontario M9M 1A4 (416) 742-6210

Bard Manufacturing Co. P.O. Box 607 Bryan Ohio. 43506 (419) 636-1194 Succursale: Heat Pumps of Canada P.O. Box 2045 Brantford Ontario N3T 5W5 (519) 756-2880

Barnes and Somes Inc. 34 Crafts St., P.O. Box 155 Newtonville Ma. 02160 (617) 332-7100 Représentants: **H.F. Clarke Ltd.** 5220 1A St., P.O. Box 5662 St. A. Calgary Alberta T2H 2Y2 (403) 255-0186 **B & C Services** 1435 Queens St. East Torogto Ontario M4L 1E2 (416) 691-3977

Basco Division 2777 Walden Ave. Buffalo New York 144225 (716) 684-6700 Distributeur: **McRae Engineering Equip Ltd.** 2 Thorncliffe Park Dr. Toronto Ontario M4H 1H2 (416) 422-3735

BBC Brown Boveri Canada Inc. 2260 Place du Canada Montreal Quebec H3B 2N2 (514) 875-7140 Succursales: 2260 Place du Canada Montreal Quebec H3B 2N2 (514) 875-7140 130 Bloor Street West Toronto Ontario M5S 1N6 (416) 967-4420 255-5th Avenue S.W. Calgary Alberta T2P 3G6 (403) 233-2755 14315-118th Avenue Edmonton Alberta T5L 4S6 (403) 453-6902 10451 Shellbridge Way Richmond C.-B. V5S 2X3 (604) 278-4501 4000 Autoroute trans-canadienne Pointe-Claire Quebec H9R 1B2 (514) 697-6210

Beckman Instruments, Inc. PICG 2500 Harbor Blvd. Fullerton California 92634 (714) 871-4848 Succursales: 6465 Northam Drive Malton Ontario L4V 1J2 (416) 677-1164 4220-23rd St., N.E., Bay #9 Calgary Alberta 2TE 5Y9 (403) 276-9824

Beel Controls Limited 2650 boul. Pitfield Montreal Quebec H4S 1G9 (514) 334-6500 Succursale: 764 Gordon Baker Rd. Willowdale Ontario M2J 2B4 (416) 494-1968

Bellofram Corporation 30 Blanchard Road Burlington MA 01803 (617) 272-2100 Distributeurs: **Muis Controls, Ltd.** Unit #4, 8306 113 Street Fort Saskatchewan Alberta T8L 272 (403) 998-7311 **Muis Controls** 610A 70 Avenue S.E. Calgary Alberta T2H 2J6 (403) 255-3741 **Hydroflo-Tubecraft Ltd.** 730 Balmoral Street Thunder Bay Ontario P7C 5V3 (807) 623-4224 **Anutronics Mechanical, Ltd.** 3550 Wolfedale road Mississauga Ontario L5C 2V6 (416) 272-1045 **Canada Panel Instrument, Ltd.** 10450 Gouin ouest Roxboro Quebec H5Y 3E8 (514) 683-6766 **Hydroflo Equipment Ltd.** 52 Caithness Street Winnipeg Manitoba R3H 0V4 (204) 633-0682

Bently Nevada Corp. P.O. Box 157 Minden NV 89423 (702) 782-3611 **Agent: J.W. Simpson, Tech. Sales/Canada Ltd.** 70 Gibsom Dr. Unit #4 Markham Ontario L3R 2Z3 (416) 495-2240

Berkeley Pump Ltd. 410 Finley Avenue Ajax Ontario L1S 2E3 (416) 683-2851 Succursales: #1-3260 Viking Way Richmond C.-B. V6V 1N6 (604) 270-8735 8191 boul. Metropolitain Est. Ville D'Anjou Quebec H1J 1X6 (514) 353-7231 117 Baig Blvd. Moncton Nouveau-Brunswick E1E 1C9 (506) 388-4744

BES Team Inc. 103 Fensview Drive P.O. Box 272 Westwood Mass. 02090 (617) 769-7899

Betz Inc. Betz Laboratories Inc. 3026 Solandt Road Kanata Ontario K2K 2A5 (613) 592-5050 Succursales: 1570 Provencher, bureau 340 Brossard Quebec J4W 2T8 (514) 866-5359 365 Evans Avenue, Suite 205 Toronto Ontario M8Z 1K2 (416) 259-7631 5045 8500 Macleod Trail S. Calgary Alberta T2H 2N1 (403) 253-2011 1055 boul. des Forges, bureau 410 Trois Rivières Quebec G8Z 4J8 (819) 373-5122 Athabaska Place, Room 212 80 Chippewa Rd. Sherwood Park Alberta T8A 3Y1 (403) 464-5951 No. 13-7621 Vantage Way Delta C.-B. V4G 1A6 (604) 946-1377

Bigelow-Liptak of Canada Ltd. 1831 Mattawa Ave. Mississauga Ontario L4X 1K7 (416) 279-9501 Succursale: 4014 MacLeod Trail S. Suite 200 Calgary Alberta T2G 2R7 (403) 243-7774

Bindicator Company 1915 Dove Street, P.O. Box 9 Port Huron MI 48060 (313) 987-2700 Distributeurs: **Pescock, Inc.** 1180 Aerowood Drive

Fournisseurs

Mississauga Ontario L4W 1Y5 (416) 625-7100 **Peacock, Inc.** C.P. 140 Montreal Quebec H3C 2X5 (514) 366-5900 **Peacock, Inc.** 2715 18th Street N.E. Calgary Alberta T2E 7E6 (403) 230-2851 **Peacock, Inc.** 3919 101 Street Edmonton Alberta T6E 0A4 (403) 462-4244 **Peacock, Inc.** 2325 Burrard Street Vancouver C.-B. V6J 3J2 (604) 731-3185

Biraghi Entrepose Parc Industriel Becancour Quebec G0X 1B0 (819) 294-2521 TELEX 05-837191

Blackhawk Industries Inc. 607 Park Street Regina Saskatchewan S4N 5N1 (306) 924-1551

Blanchard-Ness Ltd. 3850 boul. Losch St-Hubert Quebec J3Y 5T6 (514) 656-8800 Succursale: 4325 Steeles Ave. W. Downsview Ontario M3N 1V7 (416) 667-0558

Blenkhorn & Sawle Limited 100 Grantham Ave. P.O. Box 3010 St. Catharines Ontario L2R 7B9 (416) 684-9251

BLM Automatic Clutch Ltd. 863 Progress Ave. Scarborough Ontario M1H 2X6 (416) 438-6200

Bodine Electric Co. 2500 W. Bradley Pl. Chicago Ill. 60618 (312) 478-3515 Distributeurs: **Toronto Electric Co.** 72 Crockford Blvd. Scarborough Ontario M1R 3C4 (416) 755-7716 Telex 06963-654 **Renold Canada Ltd.** Park Road North Brantford Ontario N3T 5N4 (519) 756-6118 **12253 William Short Rd.** Edmonton Alberta T5B 2B7 (403) 474-2431 **P.O. Box 180** Hampton Nouveau-Brunswick E0G 1Z0 (506) 832-5324 **5760 Ave. Andover** Mont-Royal PQ H4T 1H4 (514) 731-3591 **110 Skyway Ave.** Rexdale Ontario M9W 4Y9 (416) 675-6434 **1290 Odlum Drive** Vancouver C.-B. V5L 3L9 (604) 255-8455 **1302 Notre Dame Ave.** Winnipeg Manitoba R3E 0P4 (204) 772-9541

Bogardus Wilson Ltd. 143-6450 Roberts Street Burnaby C.-B. V5G 4K1 (604) 294-9101 Succursales: 51 Terminal Avenue Nanaimo C.-B. V9R 5C4 (604) 753-1102 3153 Thunderbird Crescent Burnaby C.-B. V5A 3G2 (604) 421-1881 4451-54th Avenue S.E. Calgary Alta. T2C 2A2 (403) 279-2544 11224-143 Street Edmonton Alta. T5M 1V5 (403) 455-9121 121 Plymouth Street Winnipeg Man. R2X 2T3 (204) 633-2504

Breslove Separator Co. 1609 Commonwealth Building Pittsburgh PA 15222 (412) 281-0309 Représentant: **Elbowe Sales** 12131 Mitchell Road Richmond C.-B. (604) 324-2291

Bristol Aerospace Ltd. P.O. Box 874 Winnipeg Manitoba R3C 2S4 (204) 775-8331

Bristol of Canada 234 Attwell Drive Rexdale Ontario M9W 5B3 (416) 675-3820

Broan Ltd. 1140 Tristar Drive Mississauga Ontario L5T 1H9 (416) 676-1300 Succursale: 1140 Tristar Drive Mississauga Ontario L5T 1H9 (416) 676-1300

Brook Crompton Parkinson Ltd. 264 Attwell Dr. Rexdale Ontario M9W 5B5 (416) 675-3844 Succursale: 169/171 Rue Barr St. Laurent P.Q. H4T 1W6 (514) 735-5688

Brooks Instrument Div. Emerson Electric Can. Ltd. P.O. Box 150 Markham Ontario L3P 3J6 (416) 294-9340 Succursales: 11-3716. 56 Ave. S.E. Calgary Alberta T2C 2B5 (403) 236-0560 4645 Rue Fairway Lachine P.Q. (514) 637-3715

Brooks Instrument Division 407 W. Vine Street Hatfield, PA 19440 (215) 362-3500 Succursales: PO Box 150 Markham Ontario L3P 3J6 (416) 294-9340 Bay 11, 3716-56 Ave. S.E. Calgary Alberta T2C 2B5 (403) 236-0560

Brunette Machine Works Ltd. #5 Capilano Way New Westminster C.-B. V3L 5G3 (604) 522-3977 Succursale: 1076 Great Street Prince George, C.-B. V2N 2K8 (604) 563-0596

Buckman Laboratories of Canada Ltd. 1600 50e Ave. Lachine Quebec H8T 2V5 (514) 631-6737

Byron Jackson Div. Borg-Warner (Canada) Ltd. 23 Bertrand Avenue Scarborough Ontario M1L 2P3 (416) 757-6241 Succursales: 237 Place Frontenac Pointe Claire Quebec (514) 694-3520 8170-50th Street, Suite 264 Edmonton Alberta (403) 465-9736 5920-1A Street S.W., Suite 106 Calgary Alberta (403) 252-7769

C

C & M Products Ltd. Thomas Industries 189 Bullock Drive Markham Ontario L3P 1W4 (416) 294-9570

C-E Canada Combustion Engineering-Superheater Ltd. Suite 501-99 Bank St. Ottawa Ontario K1P 6C5 (613) 560-4545 Succursales: 1010 Rue Sherbrooke ouest bureau 605 Montreal Quebec H3A 2R7 (514) 842-8701 Suite 2810 Commercial Union Tower Toronto Dominion Centre Toronto Ontario M5K 1K7 (416) 363-8041 350-One Palliser Square Calgary Alberta T2G 0P6 (403) 264-5106 1256 United Kingdom Building 409 Granville Street Vancouver C.-B. V6C 1T2 (604) 681-7385

Caframo Ltd. Box 70, Airport Road Wiarton Ontario N0H 2T0 (519) 534-1080

Caltrol 2 Thorncliffe Pk. Dr., Unit 21 Toronto Ont. M4H 1H2 (416) 423-0692

Cambridge Filter Corp. P.O. Box 517 Mississauga Ontario L5A 3A2 (416) 678-1334

Campeau Corp. 35 Boul. Desrosiers CP 157 Gatineau Qué. J8P 6J2 (819) 663-5301

Cam-Am Air Leakage Control Systems 124 Cartwright Ave. Toronto Ont. M6A 1V2 (416) 782-0284

Can-am Instruments Ltd. Mississauga Ontario L4X 1K1 (416) 277-4541

Can-Eng Sales 6800 Montrose Rd. Niagara Falls Ontario L2E 6V5 (416) 356-1327

Canada Fans P.O. Box 1350 Picton Ontario K0K 2T0 (613) 476-2150 Succursale: P.O. Box 595 Granby Quebec J2G 8E9

Canada Valve Inc. P.O. Box 1001 Milton Ontario L9T 4B6 (416) 878-0541 Succursales: 120 Acheson Road Winterburn Alberta T0E 2N0 (403) 962-6655 840 Cynthia Street Saskatoon Saskatchewan S7L 5S5 (306) 664-8686 769 Notre Dame Drive Kamloops C.B. V2C 5N8 (604) 372-3453 305 Sheldon Drive Cambridge Ontario N1T 1A7 (519) 623-9110/653-0910 3155 Huron Church Road Windsor Ontario N9A 6J3 (519) 966-3431 1015 Hargrieve Road London Ontario N6E 1P6 (519) 686-1700 452 Bowes Road, Unit #1 Concord Ontario L4K 1C8 (416) 669-9782 25 George Street Barrie Ontario L4N 2G5 (705) 726-3221 111C Adam Street Belleville Ontario K8N 5K3 (613) 962-2533 1275 Kelly Lake Road Sudbury Ontario P3E 4M9 (705) 675-2111 C.P. 437 Succ. St. Martin 975 rue Berlier Laval Quebec H7S 1Z9 (514) 384-7360 15 Bentley Avenue Ottawa Ontario K2E 6T7 (613) 226-1313 1175 rue Janelle Drummondville Quebec J2B 6X1 (819) 478-4931

Canadian Applied Technology 16th Ave., Buttonville Airport Markham Ontario L3P 3J9 (416) 477-6681 Succursale: 500 Beaverbrook Ct. Fredericton N.B. E3B 5X4 (506) 457-1523

Canadian Boilers Ltd. 6853-B Airport Rd. Mississauga, Malton Ontario L4V 1E6 (416) 671-4600

Canadian Coleman Co. Ltd. 700 Kipling Ave. Toronto Ontario M8Z 5V6 (416) 252-6161

Canadian General Electric 940 Lansdowne Ave. Toronto Ontario M6M 3Z4 (416) 530-5052 Construction Products Dept. Succursale: Dans toutes les grandes villes **Appareils Industriels:** 107 Park St. N. Peterborough Ontario K9J 7B5 (705) 748-7559 Industrial Apparatus Department Succursales: 3707 Joseph Howe Drive, Station "A" Halifax N.-E. B3L 4H8 (902) 455-0551 3 Place du Commerce. Suite 200 Ile des Soeurs Montreal P.Q. H3E 1J2 (514) 761-3581 2200 boul. Charest ouest Quebec Quebec G1N 2G4 (418) 681-0231 505 Woodward Avenue, P.O. Box 3019 Station "C" Hamilton Ontario L8H 7J6 (416) 549-5281 48 Broad Street, P.O. Box 2480 Saint John N.B. E2L 3V9 (506) 693-2337 175 Richmond Road P.O. Box 9389 Ottawa Ontario K1G 4B3 (613) 722-6511 1900 Eglinton Ave. E. Scarborough Ontario M1L 2M1 (416) 751-3220 900 Wellington St. Sarnia Ontario N7T 7J7 (519) 344-8807 1091 LaSalle Blvd. Sudbury Ontario P3A 1Y2 (705) 566-3931 1125 McDonald St., P.O. Box 860 Regina Saskatchewan S4P 3B1 (306) 569-8055 3603-8th Street S.E. Calgary Alberta T2G 3A6 (403) 243-0244 945 St. James St., Suite 102 Winnipeg Manitoba R3H 0K4 (204) 774-5454 Suite 502 14310-111th Avenue Edmonton Alberta T5M 3Z7 (403) 451-6742 3030 East Broadway, P.O. Box 2189 Vancouver C.-B. V6B 3V9 (604) 255-2411 Division des luminaires: 115 Dufferin Toronto Ontario M6K 1Y9 (416) 537-4481 Succursale: Division des instruments de mesure: 1130 Blv Charest O. Quebec Que. G1N 2E2 (419) 683-3431 Succursale: dans toutes les grandes villes Division des revêtements de silicone: 720 Caledonia Rd. Toronto Ontario M6B 3X7 (416) 530-5667 Succursale: 5000 Rue Jean-Talon ouest Montreal Quebec H4P 1X2 (514) 989-5858

Canadian Glass Industries Ltd. 120 Adelaide Street West Toronto Ontario M5H 1T1 (416) 363-2194 Succursales: Charlebois Industries 6005 Avenue Couture Cite de St-Leonard P.Q. H1P 3E1 8484 Keele Street Concord Ontario L4K 1B3 500-10th Avenue E. Regina Sask. S4P 2Z5 9845-42nd Ave-

Fournisseurs

nue Edmonton Alta. T6E 0A3 7979 Enterprise St. Unit 1 Lake City Burnaby C.-B. V5A 1V5

Canadian Great Energy Marketing 3060 Lakeshore Rd. W. Oakville Ontario L6L 1J2 827-6446

Canadian Schack Ltd. 227 Place Frontenac Pointe Claire Quebec H9R 4Z7 (514) 694-3098

Canadian Worcester Controls Ltd. 20 Mid-Dominion Acres Scarborough Ontario M1S 4A5 (416) 298-1671.

Canarm Ltd. 149 Parkedale Ave. Brockville Ontario K6V 5V6 (613) 342-5424 Succursales: 200-1615 10th Ave. S.W. Calgary Alberta T3C 0J7 (403) 244-5810 415 Oakdale Rd. Downsview Ontario (416) 741-8891

Canertech Inc. 213 Notre Dame Ave., 10th Flr. Winnipeg Man. R3B 1N3 (204) 949-1160

Cantherm Heating Ltd. 8089 Autoroute Trans-canadienne Canada Hwy. Ville St. Laurent Quebec H4S 1S4 (514) 334-4870 Succursale: 57 Galaxy Road, Unit 6 Rexdale Ontario M9W 5P1 (416) 675-6390

Canuck Garage Doors Co. 1662 Bonhill Rd., Unit 15 Mississauga Ontario L5T 1E1 671-2700 Représentants: **Metropolitan Garage Doors Ltd.** 1770 Britannia Road East Mississauga Ontario **Upward Garage Doors Ltd.** 1094 Westprot Crescent Mississauga Ontario **Canadian Garage Doors Ltd.** 1750 Bonhill Road Mississauga Ontario

Capital Controls P.O. Box 211 Colmar PA 18915 (215) 822-2901 Représentants: **A.G. Dunbar** 2745 Dutch Village Road Halifax N.-É. B3L 4G7 (902) 455-5421 **Atlantic Tech Sales & Services** P.O. Box 4549 St-jean Terre-Neuve A1C 6C8 (709) 579-6588 **Control & Metering** 711 Kipling Avenue Toronto Ontario M8Z 5G4 (416) 259-8411 **Control & Metering** 1503 1st Street NE Calgary Alberta T2E 3B7 **Mackenzie & Feimann Ltd.** 12835 146th Street Edmonton Alberta T5L 2H6 (403) 453-1506 **Mackenzie & Feimann Ltd.** 3225-54th Avenue S.E. Calgary Alberta T2C 0A9 (403) 272-9791 **Mackenzie & Feimann Ltd.** 970 Malkin Avenue Vancouver C.-B. V6A 2K8 (604) 253-6335 **Mackenzie & Feimann Ltd.** 875 Bradford Street Winnipeg Manitoba R3H 0N6 (204) 774-1971 **Mackenzie & Feimann Ltd.** Suite 311-255 West 1st Street North Vancouver C.-B. V7M 3G8 **Mackenzie & Feimann Ltd.** 1516 Ontario Avenue P.O. Box 2028 Saskatoon Saskatchewan S7K 3S7 (306) 652-8894 **Nortec S.G.S. Inc.** 3300 Boulevard Cavendish bureau 230 Montreal Quebec H4B 2M8

Carbone Lorraine Corp. 225 boul Harwood Dorion Que J7V 1Y3 (514) 455-5728

Carborundum Resistant P.O. Box 808 Niagara Falls N.Y. 14174 (716) 278-6221 Succursales: Carborundum Canada Inc. P.O. Box 1007 Niagara Falls Ontario L2E 6W5 (416) 358-5761 Carborundum Canada Inc. C.P. 82 Edifice Air Canada Aéroport International Mirabel Quebec J7N 1A2 (514) 476-0330

Carrier Canada Limited 8100 Dixie Rd. Brampton Ontario L6T 2J8 459-8000 Distributeurs: 3630 East 1st Ave. Vancouver C.-B. V5M 1C3 (604) 291-9691 627 Manitou Road S.E. Calgary Alberta T2G 4C2 (403) 287-1723 11507-120 Street Edmonton Alberta T5G 2Y5 (403) 454-9602 #3, 1408 Ottawa St. Regina Saskatchewan S4R 1P5 (306) 522-9929 2366 Avenue C. North Saskatoon Sask. S7L 5X5 (306) 665-3242 39 Keith Road Winnipeg Manitoba R3H 0H7 (204) 633-9647 9 Cityview Drive Rexdale Ontario M9W 5A5 (416) 245-1100 3455 Harvester Rd. #19 Burlington Ontario L7N 3P2 (416) 632-2131 1770 King Street E Kitchener Ontario N2G 2P1 (519) 744-5601 747 Hyde Park Road, #109 London Ontario N6H 3S3 (519) 471-8410 1750 Courtwood Crescent Ottawa Ontario K2C 2B5 (613) 225-6974 278 Nepahwin Avenue Sudbury Ontario P3E 2H6 (705) 522-3421 3456 Walker Road Windsor Ontario N8W 3S3 (519) 966-3022 391 boul. Ste-Croix Ville St. Laurent Quebec H4N 2L3 (514) 748-8731 3004 Chemin Royal Quartier De Giffard Beauport Quebec G1E 1T6 (418) 663-2935 45 Alderney Drive #815 Dartmouth N.-É. B2Y 2N6 (902) 463-1277

Catalytic Damper Co. Ltd. Box 550 Bobcaygeon Ontario K0M 1A0 (705) 738-2349

CEA Canada 585 Blvd. Curé Boivin Boisbriand P.Q. J7G 2A8 (514) 435-1961 Succursale: 121-10551 Shellbridge Way Richmond C.-B. V6X 2W9 (604) 270-9846

Celcote Canada 2695 Drew Road Mississauga Ontario L4T 3X1 (416) 671-1790 Succursale: 1102-230 Huntington Close Calgary Alberta T2K 5X9 (403) 275-4126 Représentants: **Plasticor Sales Ltd.** 4104 Fairview Street Burlington Ontario L7L 4Y8 (416) 632-4740 **Hyatt Industries Ltd.** 1572 West 4th Avenue Vancouver C.-B. V6J 1L7 (604) 736-7301

Centri-spray Corp. 39001 School Craft Livonia Michigan 48150 (313) 464-0100 **Agent: Centri-spray Corp.** 1440 Pelham St. S. Fonthill Ontario L0S 1E0 (416) 892-2277

CES-Conservation Energy Systems Box 8280 Saskatoon Saskatchewan (306) 665-6030

CESCO 1240 N.E. 175th P.O. Box 55548 Seattle WA 98155 (206) 365-1234

Chemiquip Canada Inc. 5165 Route Queen Mary bureau 414 Montreal P.Q. H3W 1X7 (514) 484-6893

Chermacryl Plastics Limited 360 Carlingview Drive Rexdale Ontario M9W 5X9 (416) 675-4433

Chicago Blower Canada Ltd. 901 Regent Ave. W. Winnipeg Manitoba R2C 3A9 (204) 222-4216 Représentants: **M & M Engineering Ltd.** 3639 Dutch Village Road Halifax N.-É. B3N 2T1 (902) 443-1114 **Tech-Air (1981) Ltd.** 33 Blakney Street Moncton N.B. E1A 4B8 (506) 855-4515 **Comfort-Aire Ltd.** 5870 Andover ville Mont-Royal Quebec H4T 1H4 (514) 739-2351 **Walmar Agencies** 15 Caesar Avenue Nepean Ontario K2G 0B1 (613) 225-9774 **Pagon & Little Limited** Unit #1, 9 Royalcrest Rd. Toronto Ontario M9V 2L6 (416) 743-5000 **Thermal Engineering Sales Ltd.** 4240-91A Street Edmonton Alberta T6E 5V2 (403) 463-0933 **Melark Sales Incorporated** 3295 Mainway Drive, Unit 5 Burlington Ontario L7M 1A6 (416) 335-2717 **G.S. Industrial Sales Ltd.** 34 Lee Avenue North Bay Ontario P1A 2J6 (705) 474-1216 **Harnett & North Limited** 504-16th Avenue Thunder Bay Ontario P7B 2R8 (807) 344-9601 **Qu'Appelle Engineering Ltd.** 1800 College Avenue Regina Saskatchewan S4P 1C1 (306) 522-1691 **Mid-Can Mechanical Sales** 311 Hillard St. E. Saskatoon Saskatchewan S7J 0E5 (306) 664-2915 **Airtherm Engineering Sales Ltd.** #200 1615-10th Avenue S.W. Calgary Alberta T3C 0J7 (403) 245-2866 **Olympic International Agencies Ltd.** 1591 Bowser Ave. North Vancouver C.-B. V7P 2Y4 (604) 987-2291

Chloride Canada Limited 7480 Bath Rd. Mississauga Ontario L4T 1L2 (416) 677-8910 Succursale: 4946 Rue Bourg Montreal Quebec H4T 1J2 (514) 735-2573

Chromalox Canada 210 Rexdale Blvd. Rexdale Ontario M9W 1R4 743-8000

Circul-Aire Inc. 5885 Henri Bourassa O. Montreal Quebec H4R 1B7 (514) 336-3330 Succursales: 2615 Marcel Montreal Quebec H4R 1A6 (514) 336-1400 8 Bolton Toronto Ontario

Cis-Val Canada Ltd. 2 Ainshe Drive Beamsville Ontario L0R 1B0 (416) 563-4963

Clawsey-Sohrt Mfg. Co. Ltd. 1297 Industrial Rd. Cambridge Ontario N3H 4T8 (519) 653-7129

Clayton Industries 4213 N. Temple City Blvd. El Monte CA 91731 (213) 443-9381 Succursale: 67 Steelcase Rd., West Unit B Markham Ontario L3R 2M4 (416) 476-6801 Agent: **J. Dunlop Agencies Ltd.** 6706 Laird Ct. S.W. Lakeview Village Calgary Alberta T3E 6G1 (403) 249-9928

Clearview Insulating Glass 605 Fenmar Drive, Unit 1 Weston Ontario M9L 2R6 (416) 742-6555

Clemmer Industries (1964) Limited 446 Albert St. Waterloo Ontario N2J 4A1 (519) 884-4320

Cleveland Controls Inc. 1111 Brookpark Rd. Cleveland Ohio 44109 (216) 398-0330 Représentants: **MacLeod & Grant Ltd.** P.O. Box 809 251 Foord St. Stellarton N.-É. B0K 1S0 (902) 752-5532 Distributeurs: **Graham Co. Ltd.** P.O. Box 9 St-jean N.B. E2L 3X1 **Nortech Control Equipment Inc.** 135-4 The West Mall Etobicoke Ontario M9C 1C2 (416) 622-7820 **Ontor Ltd.** 12 Leswyn Rd. Toronto Ontario (416) 781-5286 Normac Ltd. 210 Brunswick Pointe Claire Quebec H9R 4Z6 (514) 694-3284

Coen Burners Canada Inc. 1350 Boul de L'industrie Lachenaie Quebec J6W 4M4 (514) 471-5007 **Agents: K.V. Combustion & Energy Systems Ltd.** 55 Nugget Avenue, Suite 223A Scarborough Ontario M1S 3L1 **Inproheat Industries Ltd.** 680 Raymur Avenue Vancouver C.-B. V6A 2R1 **Thermaltech Combustion Inc.** 8019 Rue Alfred Ville D'Anjou Qué. H1J 1J3

Coldmatic of Canada Ltd. 4500 Chesswood Drive Downsview Ontario M3J 2B9 665-8640

Coldstream Products of Canada Ltd. 1855 Sargent Avenue Winnipeg Manitoba R3H 0E3 (204) 775-8274 Représentants: 6004-101 Avenue Edmonton Alberta T6A 0G8 (403) 469-4506 144 Rundleson Way, N.E. Calgary Alberta T1Y 3H8 (403) 285-3682 40 Harrow Circle Edmonton Alberta T5A 2S5 (403) 478-8637 Distributeurs: **Dudley Kill & Sons Ltd.** 1970 Spicer Road North Vancouver C.-B. V7H 1A2 (604) 929-7331 **Fleming Pedlar Ltd.** 1009 Park Street Regina Saskatchewan S4N 5H4 (306) 352-9671 **Flem-**

Fournisseurs

Ing Pedlar Ltd. Box 1254 Saskatoon Saskatchewan S7K 3N2 (306) 244-5539 **Fleming Pedlar Ltd.** 585 Munroe Avenue Winnipeg Manitoba R2K 1H7 (204) 667-7863 **Guardsmen Distributors** 110 Norfinch Drive, Unit 8 Downsview Ontario M3N 1X1 (416) 663-6534 **Les Equipements Art Welsh Inc.** 11660, 4ieme Avenue Riviere des Prairies Quebec H1E 3B9 (514) 648-7087 **R.L. Fulton Equipment Limited** 5654 Russell St. P.O. Box 1402N Halifax N.-É. B3K 5H7 (902) 453-2650 **Ian Macinnes Enterprises Limited** 44 Wright Avenue Dartmouth N.-É. B3B 1G6 (902) 463-1773

Colorado Electro-optics Inc. 2200 Central Ave. Boulder CO 80301 (303) 494-3200

Comalco Ltd. 6325-12th Street S.E. Calgary Alberta T2H 2K1 (403) 259-3101 TELEX 03-821172 CGY Succursale: Ste. 201, 801 York Mills Rd. Don Mills Ontario M3B 1X7 (416) 449-8036 TELEX 06-966710 VIP-TOR

Combustion Research Corp. 2516 Leach Road Pontiac MI 48057 (313) 852-3611

Comeau Technique Ltd. 01260 Rue Richmond bureau 3600 Montreal Quebec H3K 2H2 937-6361

Comington Computer System Corp. P.O. Box 69 Glen Robertson Ontario K0B 1H0 (613) 874-2411 Distributeurs: **Electrodesign Ltd.** 290 Montreal Rd., Suite 2 Vanier Ontario K1L 6C1 (613) 745-0541 **Electrodesign Ltd.** 1925-5e Ave. bureau 1 Lachine Quebec H8T 3C3 (514) 636-4838

Compak Canada Inc. 2185 North Sheridan Way Mississauga Ontario L5K 1A4 (416) 882-7350 Succursales: 400 Montee De Liesse Montreal Quebec H4T 1N8 (514) 341-3432 4120-78 Avenue Edmonton Alberta T6B 3M8 (403) 468-2016

Conamara Limited 2180 Speers Road Oakville Ontario L6L 2X8 (416) 825-1400

Condecor Prod. Ltd. P.O. Box 159 Acton Ontario L7J 2M3 (416) 453-1991

Conserval Engineering Inc. 855 Alness St., Unit 1 Downsview Ontario M3J 2H8 (416) 661-7057 Succursales: P.O. Box 818 Trenton Ontario K8V 5R8 (613) 394-2492 11 Maxwell Cr. London Ontario N5X 1Y9 (519) 453-9534

Contric Automation Ltd. 1730 McPherson Court-1 Pickering Ontario L1W 3E6 (416) 839-0182

Control Devices 14605-134 Ave. Edmonton Alberta T5L 4S9 (403) 451-1440 Succursales: 7018 Lougheed Highway Burnaby C.-B. V5A 1W3 (604) 420-1333 80 Paramount Road Winnipeg Manitoba R2X 2W3 (204) 632-4471 1110 Kamato Road Unit 1 Mississauga Ontario L4W 2P3 (416) 624-4640 2323 rue Halpern St. Laurent Quebec H4S 1S3 (514) 357-9580 511 E. Ross Avenue Regina Saskatchewan S4N 4W5 (306) 359-3390 17235-105 Ave. Edmonton Alberta T5S 1H2 (403) 489-2541 10 Akerley Blvd. P.O. Box 895 Dartmouth N.E. B2Y 3Z6 (902) 463-1062 P.O. Box 2040, Station C St-jean Terre-Neuve A1C 5R6 (709) 753-3412

Conval Equipment 1111 Finch Ave. W. Downsview Ontario M3J 2E5 (416) 665-8960 Succursales: 1173 Michener Rd. Sarnia Ontario N7S 4W3 (519) 344-3646 505 Kenora Ave. Hamilton Ontario L8E 3P2 (416) 561-4579

Copes-Vulcan Div. Martin & Rice Ave. P.O. Box 577 Lake City PA 16423 (814) 774-3151 Succursale: Harvie Settlement Road Orillia Ontario L3V 6R9 (705) 326-1666 Distributeurs: **Inproheat Industries Ltd.** 680 Raymur Avenue Vancouver C.-B. V6A 2R1 **Mechanical Equipment Limited** 1071 Avenue Pratt Montreal Quebec **Thermal & Hydraulic Equipment Limited** 1425 Bayview Avenue-3rd F Toronto Ontario M4G 3A9

Corning Glass Works Houghton Park A-1-7 Corning New York, USA 14831 (607) 974-8145 Succursale: 135 Vanderhoof Ave. Toronto Ontario M4G 2J3 065-24046

Cowan Canada Ltd., H W Box 268 Richmond Hill Ontario L4C 4Y2 (416) 773-4331

Criterion Instruments Ltd. 30 Progress Ave. Scarborough Ontario M1P 4W8 (416) 299-6666

Crompton Instruments Ltd. 2717 Rena Road Mississauga Ontario L4T 3K1 (416) 671-2253 TELEX 06-983545 Succursale: 165 Rue Barr St. Laurent Quebec

CSE Ontario Limited 55 Healey Rd. Box 891 Bolton Ontario L0P 1A0 (416) 857-3474

Culligan of Canada 2213 North Sheridan Way Mississauga Ontario L5K 1A5 (416) 822-1601

Curwen & Newbery Ltd. Fleming Way, Crawley West Sussex, U.K. PH10 2QE 0293 25151

Custom Glass Ltd. 11771-167 St. Edmonton Alberta T5M 3Y2 (403) 452-6010 Succursales: 3815-72 Ave. S.E. Calgary Alberta T2C 2K3 (403) 279-8922 555 Steeprock Drive Downsview Ontario M3J 2X1 (416) 630-5153 Représentants: **Panolite Products Limited** 12114-86th Avenue Surrey C.-B. V3W 3H7 (604) 591-5531

Cutler-Hammer Industrial Control 45 Progress Ave. Scarborough Ontario M1P 2Y6 (416) 293-3673

D

Danfoss Mfg. Co. Ltd. 1230 Lakeshore Rd. East Mississauga Ontario L5E 1E9 (416) 274-2311

Danhart Energy Systems Ltd. 360 Enford Road Richmond Hill Ontario L4C 3G1 (416) 883-1711

Danhart Energy Sysems Ltd. 360 Enford Rd. Richmond Hill Ontario L4C 3G1 (416) 883-1711 Représentants: **Melark Sales Incorporated** 3295 Mainway Dr. Unit 5 Burlington Ontario L7M 1A8 (416) 335-2717

Darling Duro Ltd. Rue Prince Montreal Quebec H3C 2N2 (514) 866-3451

Deshwood Industries Ltd. P.O. Box 10 Centralia Ontario N0M 1K0 (519) 228-6624 Succursales: 150 Connie Crescent, Unit 4 Langstaff Business Park Concord Ontario L4K 1B1 (416) 669-1101 42 Highway 17B Kanata Ontario K2K 1Y1 (613) 592-1828 90 Engelhard Drive Aurora Ontario L4G 3L6 (416) 727-9459 3525 Lougheed Highway Vancouver C.-B. V5M 1A7 (604) 291-7111 1989 1st Avenue Prince George C.-B. V2L 2Z3 (604) 563-8884 2508 Kenworth Road Nanaimo C.-B. V9T 3Y4 (604) 758-2442 3261 Westsyde Road Kamloops C.-B. V2B 7G9 (604) 579-9211 3737 Scott Street Vancouver C.-B. (604) 438-5540

Detron Systems Inc. Nicholson Division 12 Oregon St. P.O. Box 113 Wilkes-Barre PA 18773 (717) 824-8701 Représentants: **Jenkins Control Systems Ltd.** #203, 1035-64th Ave. S.E. Calgary Alberta T2H 2J7 (403) 259-3346 **Jenkins Control Systems Ltd.** 10366-65th Avenue Edmonton Alberta T6H 1T9 (403) 438-0350 **Jenkins Control Systems Ltd.** 1900, 355 Burrard Street Vancouver C.-B. V6C 2J3 (604) 669-7585 **Romatec-RML** Division of Robert Muddiman Ltd. 452 McNicoll Avenue Willowdale Ontario M2H 2E1 (416) 499-0222 **Romatec-RML** Division of Robert Muddiman Ltd. 6535 Henri Bourassa ouest Montreal Quebec H4R 1C9 (515) 332-9302 **Romatec-RML** Division of Robert Muddiman Ltd. 2 Bluewater Road Atlantic Acres Industrial Park Bedford N.-É. B4B 1G7 (902) 835-5222 **Romatec-RML** Division of Robert Muddiman Ltd. 461 Scott Road Sarnia Ontario N7T 7H5 (519) 337-2329 **Romatec-RML** Division of Robert Muddiman Ltd. 2349 Fairview Street, Suite 203 Burlington Ontario L7R 2E3 (416) 632-7410

Day-Ray Products Inc. 1133 Mission St. P.O. Box 189 South Pasadena CA 91030 (213) 682-1189 Représentants: **Labelle Lubricants** 138 Clarence Gagnon St-Rose Quebec H7L 3C1 (514) 625-4409

Dean Products Inc. 985 Dean St. Brooklyn New York 11238 (212) 789-4444

Deltak Corporation P.O. Box 9496 Minneapolis Minnesota 55440 (612) 544-3371 Représentants: **Bigelow-Liptak of Canada** 1931 Mattawa Avenue Mississauga Ontario L4X 1K7 (416) 279-9501 **Bigelow-Liptak of Canada Ltd.** 4014 McLeod Trail South Suite 200 Calgary Alberta T2G 2H7 (403) 243-7774 **Bigelow-Liptak of Canada Ltd.** 4075 Av. de Courtrai Montreal Quebec H3S 1B8 (514) 731-3867 **Bigelow-Liptak of Canada Ltd.** 518 Williams Drive Box 519 Sarnia Ontario N7T 7J4 (519) 337-7548

Devar Inc. 706 Bostwick Ave. P.O. Box 589 Bridgeport CT 06601 (203) 368-6751 Représentants: **Cantech Controls Ltd.** 1916-27th Avenue N.E. Calgary Alberta T2E 7A5 (403) 230-1581 **Cantech Controls** 10604-105th Ave. Edmonton Alberta T5H 0L2 (403) 425-9810 **Cantech Controls Ltd.** 1080 Brock Rd., So. Unit #4 Pickering Ontario L1W 3H3 (416) 831-2115 **Cantech Controls Ltd.** 2800 boul. Pitfield St. Laurent Quebec H4S 1G9 (514) 334-3860 **Cantech Controls Ltd.** 242-A Indian Road So. Suite 210S Sarnia Ontario N7T 3W4 (519) 337-5081 **Cantech Controls Ltd.** 102-2225 Hanselman Court Saskatoon Saskatchewan S7L 6A8 (306) 653-4226 **Cantech Controls** 1601 West 4th Ave. Vancouver C.-B. V6J 1L8 (604) 736-2581 **Cantech Controls Ltd.** 206, 2030 Notre Dame Ave. Winnipeg Manitoba R3G 0J8 (204) 633-7254

Diamond Canapower P.O. Box 5051 1122 Pioneer Road Burlington Ontario (416) 335-0321 Succursales: Suite 812, Cogswell Tower Scotia Square Halifax N.-É. B3J 3K1 (902) 423-4182 Suite 201, 2535 boul. Cavendish, Montreal Quebec H4B 2Y5 (514) 484-8451 Suite 401, MacLeod Place Bldg. 5920

Fournisseurs

Macleod Trail S.W. Calgary Alberta T2H 0K2 (403) 253-0163 10508-169 Street Edmonton Alberta T5P 3X6 (403) 483-0474

Dillon & Co. Inc., W.C. 14620 Keswick Street Van Nuys CA., U.S.A. (213) 786-8812 Représentants: **Brian Engineering Limited.** 17 Bedford Trade Mart Bedford N.S. B0N 1B0 (902) 835-8322 **Brian Engineering Limited.** 2445 Duncan Montreal Quebec H4P 2A2 (514) 735-1671 **Brian Engineering Limited.** 45 Shaft Rd. Rexdale Ontario M9W 4M3 (416) 248-0226 **Brian Engineering Limited.** 330 Manitou Drive Kitchener Ontario N2C 1L3 (519) 576-2040 **Brian Engineering Limited.** 880 Philip St. Sarnia Ontario N7T 1Z6 (519) 337-7591

Doerr Electric Corp. P.O. Box 67 Cedarburg WIS., U.S.A. 53012 (414) 377-0500 TELEX 026744 Représentants: **Hugh Phelan Ltd.** P.O. Box 728 Bolton Ontario L0P 1A0 (416) 857-4080 **Madison Industrial Equip. Ltd.** 865 Terminal Ave. Vancouver C.-B. V6A 2N3 (604) 685-6551

Doo-al Aluminum Windows 755 Wallace Road North Bay Ontario P1B 8G4 (705) 476-2800

Douglas Power Equipt. Ltd. 1300 W. 6 Ave. Vancouver C.-B. V6H 1A7 (604) 736-0351

Dow Chemical Canada Inc. P.O. Box 1012 Sarnia Ontario N7T 7K7 (519) 339-3667 Succursales: 999 West Hastings Street Suite 1560 Vancouver C.-B. V6C 2W2 250-6th Avenue, SW Suite 3101 Bow Valley Square 4 Calgary Alberta T2P 3H7 10025 Jasper Avenue Suite 2412 Edmonton Alberta T5J 1S6 199 North Leonard Street Regina Saskatchewan S4N 5X5 201-2366 Avenue C, North Saskatoon Saskatchewan S7L 5X5 330 St. Mary Avenue #800, Royal Trust Towers Winnipeg Manitoba R3C 3Z5 170 Attwell Drive Rexdale Ontario M9W 5Z5 7th Floor, Suite 702 Cogswell Tower Halifax N.-E. B2J 2A8 P.O. Box 5728 Mark II Building Van Guard Court St-jean Terre-Neuve A1C 1A0 **Agents: Canspec Inc.** 785 Ave. Plymouth Ville Mont-Royal bureau 301 P.Q. H4P 1B3 **Canspec Inc.** Centre d'Achat Place Laurier 2700 Boul. Laurier bureau 512 Ste. Foy Quebec G1V 2L8 Distributeurs: **Ian MacInnes Enterprises** 44 Wright Avenue Dartmouth N.-E. B3B 1G6 **Ian MacInnes Enterprises Ltd.** 341 Collishaw Street Moncton Nouveau-Brunswick

Dow Corning Canada Inc. 6747 Campobello Road Mississauga Ontario L5N 2M1 (416) 826-9600 Succursales: 3300 boul. Cavendish bureau 345 Montreal P.Q. H4B 2M8 (514) 482-6030 5920 MacLeod Trail South Suite 401 Calgary Alberta T2H 0K2 (403) 253-9335 3540 West 41 St. Ave. Suite 210 Vancouver C.-B. V6N 3E6 (604) 263-0213 TELEX 04-507838

Dresser Canada Inc. 6688 Kitimat Rd. Mississauga Ontario L5N 1P8 (416) 826-8411 Succursales: 200 Avenue Rd. Cambridge Ontario N1R 5V7 (519) 621-3200 188 Pearl St. Brantford Ontario N3T 5S1 (519) 752-5414

Drummond Metal Products Ltd. 3111 Wharton Way Mississauga Ontario L4X 2B6 (416) 625-9122

Dual-Lite Products Ltd. 9345 Pascal Gagnon St-Leonard Quebec H1P 1Z4 (514) 326-8000

Dumenil Enterprises Inc. B. 844 Route Dalton T.M.R. Quebec H4T 1V5 (514) 731-3905

Duncan Instruments Ltd. 122 Millwick Dr., Unit 3 Weston Ont. M9L 1Y6 (416) 742-4448 Succursale: 6600 Autoroute Trans-canadienne bureau 150 Pointe Claire P.Q. H9R 4S2 (514) 697-0356

Duo-Matic Olsen Inc. P.O. Box 900 Tilbury Ontario N0P 2L0 (519) 682-2062 Succursales: 8200-8210 Avenue de L'Industrie Ville d'Anjou P.Q. H1J 1S7 (514) 354-4896 13281 Comber Way Surrey C.-B. V3W 5V8 (604) 596-6221 2510 Bond Street Park Forest South Illinois 60466 (312) 534-9000

Durakool Inc. 1010 N. Main Street Elkhart Indiana 46514 (219) 264-1116 Représentants: **Davis Controls Ltd.** Post Office Box 160 Islington Ontario M9A 4X2 (416) 239-2383

Duro-Test Electric Ltd. 419 Attwell Dr. Rexdale Ontario M9W 5W5 (416) 675-1623 Succursale: 43 Esterel C.P. 255 Place Bonaventure Montreal Quebec H5A 1B2 (514) 861-1529

Dwyer Instruments Inc. P.O. Box 373 Michigan City IN 46360 (219) 872-9141 **Agents: John Sherman Agencies Ltd.** 1641 Venables Street Vancouver C.-B. V5L 2H1 (604) 254-3113 **E.H. Price Sales Limited** 65 Dewdney Avenue Winnipeg Manitoba R3B 0E1 (204) 942-4521 **Baker Instruments Limited** 118 Doncaster Avenue Thornhill Ontario L3T 1L3 (416) 889-8642 **FURNECO** 4520 Rue de la Roche Montreal Quebec H2J 3J6 (514) 527-1561

Dynatron Inc. P.O. Box 745 Wallingford CT., USA 06492 (203) 265-7121 090602 Représentants: **Industrial Projects Ltd.** 100-14 The East Mall Toronto Ontario M8Z 5X2 (416) 252-7368 **Industrial Projects Ltd.** 3300 boul. Cavendish Montreal Quebec H4B 2M8 (514) 489-5769 **Willer Engineering Ltd.** 422 Consumers Road Willowdale Ontario M2J 1P8 (416) 499-4421 **Willer Engineering Ltd.** 1179 Rue Decavre Montreal Quebec H4L 3M8 (514) 748-6169

E

E.A. Electric 2265 Midland Ave. Scarborough Ontario M1P 3E7 (416) 292-2295

Eaton Corporation 9921 Clinton Road Cleveland Ohio 44144 (216) 281-2211 Représentants: **Rumble Equipment Ltd.** 25 Baywood Road Rexdale Ontario M9V 3Y8 (416) 743-8711 TELEX 065-27283 **Rumble Equipment Ltd.** 2535 boul. Cavendish bureau 205 Montreal Quebec H4B 2Y5 (514) 487-6111 TELEX 055-66347 **K.H.W. Seppala Ltd.** 12 East 3rd Avenue Vancouver C.-B. V5T 1C3 (604) 879-4541 TELEX 04-53136

EEV Canada Ltd. 67 Westmore Drive Rexdale Ontario M9V 3Y6 (416) 745-9494

Electric Power Accessories Co. Limited 27 Selby Rd. Brampton Ontario L6W 1K5 (416) 457-8300

Electric Tachometer Corp. 68th & Upland SFREET Phila. PA. 19142 726-7723 Succursales: 3351 Jacombs Road Richmond C.-B. V6V 1Z6 (604) 278-4511 9307-35th Avenue Edmonton Alberta T6E 5R5 (403) 463-7488

Electro-Air Canada 400 Eddystone Ave. Downsview Ontario M3N 1H7 (416) 743-1680 **Agents: TEPCO Clean Air Inc.** #3-115-12th Street New Westminster C.-B. B3M 4G8 **Parkland Enviro Mech Ltd.** 4607-88th St. N.E. Calgary Alberta T2N 4L5 **Beaver Engineering** 2345 Stanfield Road Mississauga Ontario L4Y 4A6 **Clawsey-Sohrt Mfg. Co. Ltd.** 1297 Industrial Road Preston Ontario N3H 4W3 **Beaver Engineering** 3129 Marentette Avenue Windsor Ontario N8X 4G1 **Beaver Engineering** P.O. Box 310 Bedford N.-E. B4A 2X3 **Beaver Engineering** Bureau de Terre-Neuve P.O. Box 9156 St-jean Terre-Neuve A1A 2X9 **Conto-Air** 1226 rue Jean Talon est Montreal Quebec H2R 1W2 **Refrigeration Installation** 1455 Toronto Street Regina Saskatchewan S4R 1N1

Electrodesign Ltd. 1925-52^{e} Ave. bureau 1 Lachine Quebec H8T 3C3 (514) 636-4838 Succursale: 4610 Dufferin St. Suite 205 Downsview Ontario M3H 5S4 (416) 664-4405

Electrohome Limited 809 Wellington St. N. Kitchener Ontario N2G 4J6 (519) 744-7111

Electromatic Components Ltd. 2990 Rue Halpern St-Laurent Que. H4S 1R2 (514) 337-1104 Succursale: 215 Carlingview Dr., Unit 111 Rexdale Ontario M9W 5E8 (416) 675-1336

Emerson Electric Canada Ltd. White-Rogers Div. P.O. Box 150 Markham Ontario L3P 3J7 (416) 294-9340 Succursale: 4645 Rue Fairway Lachine Quebec (514) 637-3715

Empire Controls 11 Bentworth Avenue Toronto Ontario M6A 1P1 (416) 787-1426

En Mar Systems Ltd. 1295 Industrial Rd. Cambridge Ontario N3H 4T8 (519) 653-8751 Succursale: 1275 Eglinton Ave. East Unit #59 Mississauga Ontario L7N 1A4 (416) 624-7457

Encon Systems Inc. 504-C Vandell Way Campbell CA 95008 (408) 866-1711

Ener-Corp Management Limited 2 Donald Street Winnipeg Manitoba (204) 477-1283

Energy Control Centre 5070 Dundas St. W. Islington Ontario M9A 1B9 (416) 239-6596

Energy Efficiency Systems Inc. 1211 Stewart Avenue Bethpage New York 11714 (516) 938-6680 Distributeurs: **Volcano Inc.** 4300 Avenue Beaudry St. Hyacinthe Quebec J2S 8A5 (514) 774-5326 Succursales: 331 Avenue Turcotte Ville Vanier P.Q. G1M 1R3 31 La Fosse Trois-Rivieres P.Q. G9A 2M6 4300 Avenue Beaudry St. Hyacinthe P.Q. J2S 805 5205 boul. Metropolitain E Montreal P.Q. H1R 1Z7 2756 Lancaster Road Ottawa Ontario K1B 4S4 1900 Ellesmere Road - Unit 14 Scarborough Ontario M1H 2W2 4194-93rd Street Edmonton Alberta T6E 5P5 429 Dewitt Rd., Unit 8 Stoney Creek Ontario L8E 4C3

Energy Farms Ltd. Box #170 R.R. #1 Kingston Ontario K7L 4V1 (613) 544-1976

Energy Management Corp. 1107 Kenilworth Drive Baltimore MD 21204 (301) 321-9400

Energy Management Systems 1585 Britannia Rd. E., Unit #7B Mississauga Ontario L4W 2M4 (416) 677-6740

Fournisseurs

Energy Systems Company 167 Dolomite Drive Downsview Ontario M3J 2N1 (416) 663-5701

Energy Systems Inc. 9025 Flying Cloud Dr. Eden Prairie MN., U.S.A. 55344 (612) 925-4354 Représentants: **Dominion Combustion Inc.** P.O. Box 342, Station U 227 Norseman St. Toronto Ontario M8Z 5P7 (416) 259-5958

Energy Technology Products Ltd. 7125-77 Avenue Edmonton Alberta T6B 0B5 (403) 468-1110 Distributeurs: **NR Murphy Ltd.** 430 Franklin Blvd. Cambridge Ontario N1R 5T8 (519) 621-6210

Energy-Wise 2000 Inc. 144 Armstrong Ave. Georgetown Ontario (416) 453-1991

Enmet Canada Ltd. #203-1945 Dundas St. East Mississauga Ontario L4X 2T8 (416) 625-2067

Enredco Canada Ltd. 7615 Kimbel St., Unit #7 Mississauga Ontario L5S 1A8 678-0100

Entech Inc. 889 Bord-De-L'eau St. Sulpice Quebec J0K 3J0 (514) 589-5372

Enterprise Fdy. Co. Ltd. Lorne St. Sackville N.B. E0A 3C0 (506) 536-1160 Succursales: 137 Horner Ave. Toronto Ontario M8Z 4Y1 (416) 255-8171 5600 Rue Ferrier Ville Mont-Royal P.Q. H4P 1M7 (514) 733-2213 11349-166A St. Edmonton Alberta T5M 3W4 (403) 454-7992 3450 Wellington Ave. P.O. Box 76829, Station S Vancouver C.-B. V5R 5T2 (604) 437-3771

Entwistle Ltd., R.R. 12 Toffoli Place Willowdale Ontario M2M 3M5 (416) 221-8604

Environmental Energies Inc. 98 Front Street Copemish Michigan 49625 (616) 378-2921

Envirospec Inc. P.O. Box 86 Station "U" Toronto Ontario M8Z 5M4 (416) 252-2090

ERDCO Engineering Corp. Post Office Box 1310 Evanston Illinois, U.S.A. 60204 (312) 328-0550

Ernst Gage Co. 250 So. Livingston Ave. Livingston N.J., USA 07039 (212) 992-1400 Représentants: **Higginson Equipment Sls.** P.O. Box 5011 Burlington Ontario L7R 3Z4 (416) 335-2211 **Dolco Equipment Ltd.** 304-3130-66th Avenue, S.W. Calgary Alberta P2K 5K8 **Conval, Quebec** 3115 Rue Sarteion. Ville St. Laurent Montreal Quebec H4R 1E7 (514) 332-2301 **Finnan Engineering** 1149 Bellamy Rd. North Scarborough Ontario M1H 1H7 (416) 438-6070

Escodyne Ltd. P.O. Box 2088 Harvie Settlement Rd. Orillia Ontario L3V 6R9 (705) 326-3041 Représentants: **J.R. Stephenson Ltd.** 3624 Manchester Road S.E. Calgary Alberta T2G 3Z5 (403) 287-1930 **J.R. Stephenson Ltd.** 11627-145th Street Box 3336 Edmonton Alberta T5L 4J2 (403) 454-4596 **Makinson Winchester** 3640 Weston Road Unit #11 Weston Ontario M9L 1W2 (416) 749-8244 **Makinson Winchester** 5100 Rue St. Francois St. Laurent Montreal Quebec H4S 1J8 (514) 334-1050 **J.R. Stephenson Ltd.** 1075 McDonald Street Regina Saskatchewan S4P 3C4 (306) 569-0654 **J.R. Stephenson Ltd.** 401-44th Street E. Saskatoon Saskatchewan S7K 0V9 (306) 242-1231 **Warco Specialties** 1243 A Kingsway Vancouver C.-B. V5V 3E2 (604) 873-1618 **J.R. Stephenson Ltd.** 555 Madison Street Winnipeg Manitoba R3H 0L6 (204) 775-8561

ESD Industries Inc. 1146 Westport Cr., Unit 6 Mississauga Ontario L5T 1G1 (416) 671-3787 TELEX 968946

Esterline Angus Instrument Corp Box 24000 Indianapolis Indiana 46224 (317) 247-9164 Représentants: **Assoc. Test Equip. Ltd.** 4216-12th St. N.E. Calgary Alberta T2A 5H7 (403) 230-1697

Extech Systems 1638 W. 6th Ave. Vancouver C.-B. V6J 1R3 (602) 734-4211

F

Fabrication Z-Air Inc. 690 Place Trans-Canada Longueuil Quebec J4G 1P2 (514) 527-4541

Farrier Inc. 514 GSB Building 1 Belmour ave. Bala-Cynwes PA 19004 (215) 667-3590 Représentants: **Thermaco Eng.** P.O. Box 569 Streetsville Ontario L5M 2C1 (416) 821-9700

Fattal Thermocanvas 30 Gloucester St., Suite 912 Toronto Ontario M4Y 1L6 (416) 923-2201 Succursales: Wild Rose Building 599 Taylor St. Vancouver C.-B. V6B 2K3 (604) 228-0215 JTL Building 2020 Centre Ave., N.E. Calgary Alberta T2E 0B1 (403) 236-3205 ou 1 (800) 361-6171 Cratepack Building 9135-39 Ave. Edmonton Alberta T2E 0B1 (403) 463-7117 ou 1 (800) 361-6171

Fibergias Canada Inc. 3080 Yonge St. Toronto Ontario M4N 3N1 (416) 482-2836 Succursales: P.O. Box 2209 68 McIlveen Dr. Saint Jean N.B. E2L 3V1 (506) 657-5850 2499, rue Watt Ste-Foy Québec G1P 3X2 (418) 651-4230 1875-52e Avenue Lachine Québec H8T 2Y1 (514) 636-4800 2750 Sheffield Road Ottawa Ontario K1B 3V9 (613) 745-0064-5-6 310 Humberline Drive Rexdale Ontario M9W 5S2 (416) 675-3070 398 Kenora Avenue Hamilton Ontario L8H 7L4 (416) 561-2011-2-3-4 219 Oxford Street Suite 102 London Ontario N6H 1S7 (519) 438-2131 89 Border Place 1313 Border Street Winnipeg Manitoba R3H 0X4 (204) 633-8076 15022 116th Avenue Edmonton Alberta T5M 3T4 (403) 452-8430 3807 9th Street S.E. Calgary Alberta T2C 3C7 (403) 243-5561 2445 Beta Avenue Burnaby C.-B. V5C 5N1 (604) 294-6211

Fielding Crossman & Assoc. Ltd. 606 Gordon Baker Rd. Willowdale Ontario M2H 3B4 (416) 497-9111

Filterite/Brunswick Tech. Div. 2033 Greenspring Dr. Timonium Md 21155 (301) 252-0800 Représentants: **General Filtration & Engr. Ltd.** 1361 Huntingwood Drive, Unit 12 Scarborough Ontario M1S 3J1 (416) 293-7744 **Industrial Projects** 3300 boul. Cavendish bureau 145 Montreal Quebec H4B 2M8 (514) 489-5769

Fischer & Porter (Canada) Ltd. 134 Norfinch Dr. Downsview Ontario M3N 1X7 (416) 667-9800 Succursales: #4-1485 Rupert Street North Vancouver C.-B. V7J 1G1 (604) 986-4145 TELEX: 04-352712 610-70 Avenue, #209 Calgary Alberta T2H 2J6 (403) 259-3425 TELEX: 038-27963 216-1294 Border Street Winnipeg Manitoba R3H 0M7 (204) 632-6321 TELEX: 07-57109 MFP Controls Limited 970 Montee de Liesse, bureau 200 Ville St-Laurent P.Q. H4T 1W7 (514) 332-6162 TELEX: 05-824681 Bedford N.-É. (902) 835-8353 TELEX: 019-23509 322 FISHER CONTROLS CO. OF CANADA LTD. **Fisher Controls Co. of Canada Ltd.** P.O. Box 578 Woodstock Ontario N4S 7Z6 (519) 539-9892 Représentants: **Lakeside Controls Limited** R.R. #1 Hyde Park Ontario N0M 1Z0 (519) 472-6771 **Kambria Controls Limited** P.O. Box 6800 Concord Ontario L4K 1B6 (519) 669-9300 TELEX: 06-964542 **Kambria Controls Limited** 87 Magill Street Walden Industrial Park R.R. #1 Copper Cliff Ontario P0M 1N0 (705) 692-3693 TELEX: 067-7292 **Laurentide Controls (1978) Ltd.** 2909 Kepler Ste. Foy Quebec G1X 3V4 (418) 659-4523 TELEX: 051-31705 **Laurentide Controls (1978) Ltd.** 880 Rue Selkirk C.P. 450 Pointe Claire Quebec H9R 4P3 (514) 697-9230 TELEX: 05-821591 **Atlantic Controls Ltd.** Champlain Center, Suite 100 725 Champlain Street Dieppe Nouveau-Brunswick E1A 1P6 (506) 854-3588 TELEX: 014-2333 **Control Tech** 6-2166 Notre Dame Winnipeg Manitoba R3H 0K2 (204) 633-9197 TELEX: 07-57683 **Spartan Controls Limited** 2810 12 Street, N.E. Calgary Alberta T2P 1R3 (403) 230-4581 TELEX: 0382-1775 **Spartan Controls Limited** 8525 Davies Road Edmonton Alberta T6E 4N3 (403) 465-5231 TELEX: 037-2464 **Septre Controls** 498 Henderson Dr. Regina Sask. S4N 6E3 (306) 543-6925 TELEX: 071-2691 **Norpec Controls Limited** 30 Gostick Place North Vancouver C.-B. V7M 3G3 (604) 980-5701 TELEX: 04-3523-83 **Fisher Controls Co.** 45 Cowansview Rd. Cambridge Ontario N1R 7L2 (519) 622-2240 TELEX: 069-59486 **Fisher Service Co.** 8724 53rd Ave. Edmonton Alberta T6E 5G2 (403) 468-4811 TELEX: 037-3539

Flair Hydronics (Canada) Ltd. P.O. Box 2089, 581 Hyde St. Prescott Ontario K0E 1T0 (613) 925-4263

Flakt Canada Ltd. P.O. Box 5060, Station F Ottawa Ontario K2C 3P9 (613) 226-3300

Fleming Ltd., S.W. 49 Howden Rd. Scarborough Ontario M1R 3C9 (416) 751-6011 Succursales: Quebec (514) 336-4990 C.-B. (604) 278-3785

Flexitallic Gasket Co. Inc. 155 Heller Place Bellmawr NJ 08031 (609) 931-2500

Fluid Data Inc. 1844 Lansdowne Ave. Merrick NY 11566 (516) 223-2190 Représentants: **Catrol Ltd.** 2 Thorncliffe Park Drive Unit 21 Toronto Ontario M4H 1H2 (416) 423-0692 **Galvanic Analytical Systems** 9202 Horton Road, S.W. P.O. Box 8550, Sta. F. Calgary Alberta T2V 2X4 (403) 253-6576

Foster Wheeler Limited P.O. Box 3007 St. Catharines Ontario L2R 7B7 (416) 688-4434 Succursales: P.O. Box 3007 3505 Fourteenth Street. S.W. Calgary Alberta T2T 3W2 (403) 243-8067 85 Richmond Street West Suite 810 Toronto Ontario M5H 2C9 (416) 366-1901 262 East Espianade, Unit 7 North Vancouver C.-B. V7L 1A3 (604) 986-3457 666 Sherbrooke, Ouest, bureau 802 Montreal Quebec H3A 1E7 (514) 284-0026

Fostoria Industries, Inc. 1200 N. Main Street Fostoria Ohio 44830-0986 (419) 435-9201 Représentants: **Nortron Industries, Ltd.** 1140 Tristar Drive Mississauga Ontario L5T 1H9 (416) 676-1300

Foxboro Canada Inc. 707 Dollard La-Salle Québec H8P 1S5 (514) 366-4210

Fournisseurs

Succursales: 567 St. Georges Street Moncton N.B. E1E 2B9 (506) 855-5174 3289 Lenworth Drive Mississauga Ontario L4X 2B9 (416) 625-4111 102-894 St. James Street Winnipeg Manitoba R3G 3J7 (204) 775-8058 7911 Argyle Road Edmonton Alberta T6C 4A9 (403) 468-3025 Distributeurs: **2480 39th Avenue, N.E.** Calgary Alberta T2E 6X1 (403) 230-5988 **1410 Boundary Road** Vancouver C.-B. V5K 4V3 (604) 291-7248

Fram Canada Inc. 305 Romeo St. Stratford Ontario N5A 6V4 (519) 271-3470

Frommelt Industries, Inc. 2455 Kerper Blvd., P.O. Box 658 Dubuque Iowa 52001 (319) 589-2736 Distributeurs: **Fibre-Metal Canada, Ltd.** 377 Olivewood Road Toronto Ontario M8Z 2Z8 (416) 239-4366

Fromson Heat Transfer Ltd. 77 Railside Road Don Mills Ontario M3A 1B2 (416) 447-5541

FTS Systems, Inc. P.O. Box 158 Stone Ridge NY 12484 (914) 687-7664 Représentants: **Spectrex Ltd.** 5240 Ferrier, bureau 508 Montreal Quebec H4P 1L6

Fulton Boiler Works, Inc. P.O. Box 257 Port & Jefferson Streets Pulaskie N.Y. 13142 (315) 298-5121 Succursale: 273A Bowes Road Concord Ontario L4K 1B1 (416) 669-4140

Furnas Electric Canada Ltd. 455 Steelcase Rd. East Markham Ontario L3R 1G3 (416) 475-1798 Agents: **CANSCO Agencies Ltd.** 3941 Grant Street Burnaby C.-B. V5C 3N4 (604) 291-7252 TELEX: 04-354546 **Emmersales Ltd.** 55 Chandler Crescent Moncton Nouveau-Brunswick E1E 3W6 (506) 855-1010 TELEX: 014-2875 **PDMC Electrical Sales Ltd.** 345 Isabey St. Laurent Quebec H4T 1Y2 (514) 342-6585 TELEX: 05-824999 **R.J.S. Electrical & Mechanical Sales Ltd.** 2300 Stevenage Drive. Bay #1 Ottawa Ontario K1G 3W3 (613) 526-1242 TELEX: 053-3927 **Western Electrical Technical Sales** 1115 Edmonton Trail N.E. Calgary Alberta T2E 3K3 (403) 230-4755 TELEX: 03-821403 **Western Electrical Technical Sales** 5207-20th Ave. Edmonton Alberta T6L 1J2 (403) 462-2851 TELEX: 037-2878 **Peter Stokes Agencies** 22 Ruttan Bay Winnipeg Manitoba R3T 0H6 (204) 475-8641 TELEX: 07-55614

Furneco Industrial Supplies & Instr. Co. Ltd. 4520 rue De La Roche Montreal P.Q. H2J 3J6 (514) 527-1561

Futura Coatings, Inc. 9200 Latty Ave. Hazelwood MO 63042 (314) 521-4100

FX Systems Corporation 77 Cornell St. CPO Box 1818 Kingston NY 12401 (914) 338-0515

G

G & S Mill, Inc. 75 Otis St. Northborough MA 01532 (617) 393-9266 Distributeurs: **Energivert** 1252 Rte 170 St Gedeon, Lac St. Jean Quebec G0W 2P0 (418) 345-2484

Garland Commercial Ranges Limited 1177 Kamato Road Mississauga Ontario L4W 1X4 (416) 624-0260 Succursale: 436 Isabey Ville Ste-Laurent P.Q. H4T 1V3 (514) 735-6271

Gas Energy Inc. 195 Montague St. Brooklyn New York 11201 (212) 643-5163

Gates Canada Inc. 300 Henry St. Brantford Ontario N3T 5W1 (519) 759-4141 Succursales: 114 Norfinch Drive, Unit #5 Downsview Ontario M3N 1X1 (416) 663-8130 3835 East First Ave. North Burnaby C.-B. V5C 5T6 (604) 291-7704 Distributeurs: 505 boul. **Montpellier** Montreal Quebec H4N 2G6 (514) 747-1168 **8315 Davies Road** Edmonton Alberta T6E 4N3 (403) 468-3168

Gaylord Regethermic Canada Ltd. 2570 Drew Rong. Mississauga Ontario L4T 3M5 (416) 676-1960

Gelber Pumps, Inc. 3721 W. Morse Ave. Lincolnwood IL 60645 (312) 673-5800 Distributeurs: **John Vissers Sales Co.** R.R. #2 Bradford Ontario L0G 1C0 (416) 677-4761

Gen-Tec Inc. 2625 Dalton Ste-Foy (Quebec) G1P 3S9 (418) 651-8000 Succursale: 790 Boul. Laurentien bureau 207 Montreal Quebec H4M 2M6 (514) 747-7594

General Scientific Equipment Co. P.O. Box 27309 Philadelphia Pa 19118-0255 (215) 424-1550

George Ellison Ltd. P.O. Box 280 Wellhead Lane Perry Barr Birmingham England B42 2TD (021) 356-4502 TELEX 339467 ELISON G

George Kelk Limited 48 Lesmill Road Don Mills Ontario M3B 2T5 (416) 445-5850

GLE Inc. 14 Connell Court Toronto Ontario M8Z 1E7 (416) 255-8161 Représentants: **GLE Inc.** P.O. Box 80402 Burnaby C.-B. V5H 3X6 (604) 435-4208 TELEX: 04-54542 GLE Inc. P.O. Box 896 Edmonton Alberta T5J 2L8 (403) 424-3837 TELEX: 06-967763 GLE Inc. P.O. Box 3629, Station B Calgary Alberta T2M 4M4 (403) 261-3837 TELEX: 06-967763 Smith, Patterson & Assoc. 489 Kensington St. Winnipeg Manitoba R3J 1J8 (204) 885-1376 TELEX: 07-587711 GLE inc. R.R. #3 London Ontario N6A 4B7 (519) 473-2760 TELEX: 06-967763 GLE Inc. 11475 Cote de Liesse bureau 210 Dorval Quebec H9P 1B3 (514) 631-3486 TELEX: 05-822683 A.T. Dean & Associates P.O. Box 1604 Halifax N.-É. B3J 2Y3 (902) 469-9916 TELEX: 01-922854

Golden Triangle Windows Ltd. 888 Guelph St. Kitchener Ontario N2H 5Z6 (519) 579-3810

Gotaverken Energy Systems 73 Water St. N. Cambridge Ontario N1R 3B4 (519) 622-0440

Gould Inc., Industrial Controls Division 103 Broadway Bedford OH 44146 (216) 232-8200 Distributeurs: **NEECO Industries Ontario** 3077 Mainway Burlington Ontario L7R 4C5 (416) 335-1403 (416) 827-8000

Grace & Co. of Canada Ltd. W.R. 294 Clements Road West Ajax Ontario L1S 3C6 (416) 683-8561 Succursales: 255 Ave. Lafleur La Salle Quebec H8R 3H4 (514) 366-3362 14810-123rd Ave. Edmonton Alberta T5L 2Y5 (403) 454-4511

Graham Company P.O. Box 160 Menomonee Falls WI 53051 (414) 251-1100 Représentants: **Enterprise Ind. Products** 467 Speers Rd., Unit #12 Oakville Ontario L6K 3S4 (416) 844-2551

Graham Fiber Glass Limited 300 Main St. Erin Ontario N0B 1T0 1 (416) 453-1912

Graham Products Limited Box 2000 Inglewood Ontario L0N 1K0 (416) 457-5290

Great North Conservation Products Inc. Box 505 Markham Ontario L3P 3R1 (416) 294-5748

Grepon Ltd. 115 Bowes Rd., Unit 14B Concord Ontario L4K 1B1 669-5000

GSW Inc. 599 Hill Street W. Fergus Ontario N1M 2X1 (519) 843-1610 Succursales: 8400 Cote de Liesse Ville St. Laurent P.Q. H4T 1G7 (514) 733-9554 1000 Powell Ave. Winnipeg Manitoba R3H 0H6 (204) 633-4424 7080 River Road Suite 219 Richmond C.-B. (604) 270-3639

GTE Products Corp. One Stamford Forum Stamford CT 06904 (800) 221-3333 Succursale: GTE Sylvania Canada Limited Electrical Equip. 1550 Birchmount Rd. Scarborough Ontario M1P 2H1

GTE Sylvania 35 Vulcan St. Rexdale Ontario M9W 1L3 (416) 247-6171 Succursales: C.-B. V8N 5R7 (604) 721-1233 6102 Silver Ave. P.O. Box 80009 Burnaby C.-B. V5H 2Y2 (604) 435-4151 TELEX 04-354560 106-3750 19th St. N.E. Calgary Alta. T2E 6V2 (403) 276-9921 TELEX 03-822719 14335-121A Ave. Edmonton Alta. T5L 2T1 (403) 252-8130 TELEX 03-72492 1237 Albert St. Regina Sask. S4R 2R5 (306) 352-2476 TELEX 07-12664 615-2nd Ave., N. Saskatoon Sask. S7K 2C7 (306) 242-7515 540 Marjorie St. Winnipeg Man. R3H 0S9 (204) 775-7123 TELEX 07-57694 837 Vimy St. North Bay Ont. P1B 5B6 (705) 472-5804 920 Commissioners Rd. East London Ont. N5Z 3J1 (519) 686-7000 2564 Cavendish Dr. Burlington Ont. L7P 4K3 (416) 335-6514 122 Forestwood Dr. Kitchener Ont. N2N 1B6 (519) 745-0212 P.O. Box 29 Bridgenorth Ont. K0L 1H0 (705) 292-9842 1704 Carling Ave. Ottawa Ont. K2A 1C7 (613) 722-3960 8750 Chemin de la Côte de Liesse Montreal Que. H4T 1H3 (514) 735-4201 TELEX 05-825884 Bureau 210 2750 Chemin Ste-Foy Quebec Que. G1V 1V6 (418) 658-6936 145 Harvey Road Riverview N.B. E1B 2K2 (506) 386-5486 8 Ralston Ave. P.O. Box 539 Dartmouth N.É. B2Y 3Y8 (902) 463-7710 TELEX 01-931465 P.O. Box 436 Goulds T.-N. A0A 2K0 (709) 368-7001

Guaranty Performance Co. Inc. 1120 E. Main Independence KS 67301 (316) 331-0020

Guildline Instruments Limited 21 Gilroy Street Smiths Falls Ontario K7A 4S9 (613) 283-3000

Guth Lighting 2615 Washington P.O. Box 7079 St. Louis MO 63103 63177 (314) 533-3200 Représentants: **Visioneering** 24 Ward Street M6H 4A6 Toronto Ontario (416) 534-7991

H

H.O.P. Consulab Inc. 415 Ave. Des Laurentides C.P. 5362 Beauport P.Q. G1E 6C3 (418) 661-3701

Hach Company P.O. Box 389 Loveland Colorado, U.S.A. 80539 (303) 669-3050 Représentants: **Sealand Sales Limited** 2960 West Fourth Ave. Vancouver C.-B. V6K 1R4 (604) 736-9744 TELEX 04-508536 **Fryston Associates Co. Ltd,** 83 Galaxy Blvd. — Unit 3 Rexdale Ontario M9W 5X6 (416)

Fournisseurs

675-5626 TELEX 06-989537 Distributeurs: **John Meunier Inc.** 6290 Rue Perinault Cartierville Montreal Quebec H4K 1K5 (514) 334-7230 TELEX 05-825693

Hankison Corp. 1000 Philadelphia St. Canonsburg PA 15317 (412) 745-1555 Distributeurs: **Black & Baird Limited** 1362 Venables St. Vancouver C.-B. V5L 2G4. (604) 251-2232 **Devilbiss (Canada) Limited** P.O. Box 3000 Barrie Ontario L4M 4V6 (705) 728-5501 **Almark Travers Limited** P.O. Box 716, Station "B" Willowdale Ontario M2K 2P9 (416) 441-2354 **Eakins Tech** C.P. 308, A.M.F. Montreal Quebec H4Y 1A8 (514) 631-5993

Hanson Inc. 45 Vansco Road Toronto Ontario M8Z 5J7 (416) 255-1371

Haskel Inc. 100-94 East Graham Place Burbank CA 91502 (213) 843-4000 Distributeurs: **Applied Hydraulics Co.** 865 Wall Street Winnipeg Manitoba R3G 2T9 (204) 786-7436 TWX 0755182 **Delta KHydraulic Power** 8223 Davies Road Edmonton Alberta T6E 4N1 (403) 465-5491 **#28-970 Laval Crescent** Kamloops C.-B. V2C 5P5 (604) 372-0744 **2231 Vauxhall Place** Richmond C.-B. V6V 1Z5 (604) 278-4288 TELEX 04-357574 **N L Rucker Products** Unit No. 8, 711-48th Ave. Calgary Alberta T2G 4X2 (403) 243-4533 **TWX 03924644 8503 Davies Road** Edmonton Alberta T6E 4N3 (403) 465-7536 **TWX 0372361 Wainbee Limited** 731 Wilson Ave. Kitchener Ontario N2C 1J1 (519) 893-6750 **100 Bessemer Rd.** London Ontario N6E 1R2 (519) 681-6266 **3090 American Drive** Mississauga Ontario L4V 1S3 (416) 243-1900 TELEX 06-989463 **1590 Liverpool Ct.** Ottawa Ontario K1B 4L2 (613) 744-1720 **215 boul. Brunswick** Pt. Claire P.Q. H9R 4R7 (514) 697-8810 **TWX 05821824 1375 Boul Charest Ouest** Quebec P.Q. G1N 2E7 (418) 683-1956 **8828 Selkirk St.** Vancouver C.-B. V6P 4K1 (604) 266-8351 **2895 Walker Rd., Unit 4** Windsor Ontario N8W 3R2 (519) 966-4332

Hayes Dana P.O. Box 6000 Beamsville L0R 1B0 (416) 563-4991 Succursales: Vancouver 156 W. 8th Ave. V5Y 1N2 (604) 879-5025 Calgary 2421 Centre Ave. S.E. T2E 0A9 (403) 248-1994 Toronto 7 Meridian Rd. Rexdale M9W 4Z6 (416) 675-1476 Montreal 17 Valois Bay Pte. Claire H9R 4B4 (514) 695-7602

Hayward Tyler One Vulcan Street Rexdale Ontario M9W 1L3 (416) 243-1400

HCP Industrial Sales C.P. 12 Pointe Claire Quebec H9R 4N5 (514) 636-8423

Heat Extractor Corporation P.O. Box 268 10 New Street St. Johnsville New York 13452 (518) 568-2288 Représentants: **Brock Engineering Mfg. Co. Ltd.** 4305 Iberville Montreal P.Q. (514) 527-8071

Heat Pumps of Canada Limited P.O. Box 2045 Brantford Ontario N3T 5W5 (519) 756-2880

Heat Recovery of Montreal 270 Rue St. Charles Beaconsfield P.Q. H9W 2X5 (514) 695-4598

Heat Seal Equipment 140 Milner Ave., Unit #30 Agincourt Ontario M1S 3R3 298-2111

Heat-Trievar Systems 1246 High Street Fairport Harbor Ohio, U.S.A. 44077 (216) 357-0220 Représentants: **Clawsey-Sohrt** 1297 Industrial Road Cambridge Ontario N3H 4T8 (519) 653-7129

Heating Alternatives Inc. P.O. Box 2078 Great Neck New York 11022 (516) 466-3475

Hecon Canada Inc. 80 Galaxy Blvd. Rexdale Ontario M9W 4Y8 (416) 675-3663 Succursales: 1320 boul. Graham Montreal P.Q. H3P 3C8 (514) 737-3671 18124-107th Ave. Edmonton Alberta T5S 1K5 (403) 484-0513

Heinemann Electric

Heniex 1300 Jules-Poitras Montreal H4N 1X8 (514) 337-3331

Henry Vogt Machine P.O. Box 1918 Louisville KY 40201 (502) 634-1511 Distributeurs: **Crane Canada Ltd.** Crane Supply Div. 293 Church St. Moncton NB **Fleck Brothers Ltd.** 110 Alexander St. Vancouver C.-B. (604) 684-8131 **Lytle Specialties Ltd.** 10, 5925-12th St. S.E. Calgary Alberta T2H 2M3 (403) 259-4311 **Lytle Specialties Ltd.** P.O. Box 326 Dartmouth N.-E. (902) 466-2444 **Lytle Specialties Ltd.** 8405 Wagner Road Edmonton Alberta T6E 5A7 (403) 465-0711 **Lytle Specialties Ltd.** 6445 boul. De Maisonneuve Montreal Quebec H4B 2Z1 (514) 487-7820 **Lytle Specialties Ltd.** P.O. Box 2109 Sarnia Ontario N7T 4L1 (519) 344-8874 **Lytle Specialties Ltd.** 428 Millen Road Stoney Creek Ontario L8E 3N9 (416) 662-5522 **Lytle Specialties Ltd.** 86 Torlake Crescent Toronto Ontario M8Z 1C3 (416) 252-3181 **Lytle Specialties Ltd.** 102 King Edward St. East Winnipeg Manitoba R3H 0N8 **Utility & Industrial Supply Co.** (Canada Ltd.) P.O. Box 999 Sarnia Ontario N7T 7K6 (519) 344-3614

Hewlett Packard Canada Ltd. 6877 Goreway Dr. Mississauga Ontario L4V 1M8 (416) 678-9430

Hick Hargreaves and Co. Ltd. Crook Street Bolton England BL3 6DB Bolton (0204) 23373

Hirt Combustion Engineers 931 South Maple Avenue Montebello CA 90640 (213) 728-9164 Représentants: **Thermaco Engineering Services Ltd.** P.O. Box 569 Streetsville Ontario L5M 2C1 (416) 821-9700

Hoffman Engineering Company 9th & Tyler Street Anoka Minnesota 55303 (612) 421-2240 Représentants: **DCL Company Inc.** 173 William Roe Blvd. Newmarket Ontario L3Y 1B4 (416) 895-7189 **Eltron Enterprises Ltd.** 7583 Vantage Place Tilbury Ind. Park Delta C.-B. V4G 1A5 (604) 946-1271

Hoke Controls Ltd. 2240 Speers Road Oakville Ontario L6L 2X8 (416) 827-9807

Holmes Insulations Inc. P.O. Box 2079 561 Scott Road Sarnia Ontario N7T 7L4 (519) 336-7770

Holophane 1620 Steeles Avenue Brampton Ontario L6T 1A5 (416) 793-3111 Succursales: 8368 Bougainville Montreal Que. H4P 2G3 (514) 735-5906 18 Warrender Ave. Islington Ontario M9B 5Z2 (416) 233-9871 1520 Crestlawn Dr. Burnaby C.-B. V5B 3K1 (604) 291-9079

Honeywell Braukmann Inc. 5601 Steeles Avenue West Weston Ontario M9L 1S7 (416) 749-8491

Honeywell Ltd. 155 Gordon Baker Rd. Willowdale Ontario M2H 3N7 499-6111

Hunt & Moscrop (Canada) Inc. P.O. Box 355 Granby Que. J2G 8E5 (514) 378-2655 Représentants: **Canada Fans** P.O. Box 1350 Picton Ontario K0K 2T0 (613) 476-2150

Hunter Enterprises Orillia Ltd. Box 400 Orillia Ontario L3V 6K1 (705) 325-6111

Hy-Cal Engineering 9650 Telstar Ave. El Monte CA 91731 (213) 444-4000 Représentants: **Intertechnology** P.O. Box 219 Scarsdale #1 Don Mills Ontario M3C 2S4 (416) 445-5500

I

I.F. Industries Inc. 1426 Wallace Rd. Oakville Ontario L6L 2Y2 (416) 827-6358

ICG Canadian Propane Ltd. 112 Basaltic Rd. Box 670 Maple Ontario L0J 1E0 (416) 667-0770

ICG Manufacturing Ltd. Inter-City Gas Building 444 St. Mary Avenue Winnipeg Manitoba R3C 3T7 (204) 944-9920 Succursales: 695 Berry Street Winnipeg Manitoba (204) 786-6552 340 Welland Avenue St. Catharines Ontario (416) 682-8621 1065 Avenue Perron Laval Quebec (514) 622-5525 2610-3rd Avenue. N.E. Calgary Alberta (403) 273-7800 1395 Spruce St. Winnipeg Manitoba (204) 774-1831 442 Limestone Crescent Toronto Ontario (416) 661-4896

IDH Eng. Products Inc. 110 Babcombe Dr. Thornhill Ontario L3T 1N1 (416) 886-2210

IDI Electric (Canada) Ltd. 33 Fuller Road Ajax Ontario L1S 2E1 (416) 683-3400 TELEX 06981299

Illinois Water Treatment Company 4669 Shepherd Trail Rockford IL., U.S.A. (815) 877-3041

Indusco Engineering 48 Chauncey Ave. Toronto Ontario M8Z 2Z4 (416) 231-9377

Industrial Air Inc. P.O. Box 215 Amelia OH 45102 (513) 753-5280 Représentants: **Mark Hot Inc.** 400 Place Trans-Canada Longueuil Quebec J4G 1N9 (514) 670-4050

Industronics Inc. 489 Sullivan Ave. P.O. Box G South Windsor CT., U.S.A. 06074 (203) 289-1551 TELEX 643224

Inficon Systems Ltd. 498 Main St. E. Hamilton Ontario L8N 1K7 (416) 528-9225

Infranor Canada Inc. 5650 Trudeau St. Hyacinthe Qué. J2S 1H4 (514) 464-0081

Infrascan Inc. 207-7080 River Rd. Richmond C.-B. V6X 1X5 (604) 273-8655

Ingersoll-Rand Canada Inc. 3950 Cote Vertu St. Laurent Quebec H4R 2J4 (514) 335-0650 Succursales: 630 boul. Dorchester ouest Montreal Quebec H3B 1S6 333-11th Avenue Calgary Alberta T2R 0C7 255 Lesmill Road Don Mills Ontario M3B 2V1 444 Barrydowne Road Sudbury Ontario P3A 3T3 1695 Main Street Vancouver C.-B. V6A 2W7 3950 Cote Vertu St. Laurent Quebec H4R 2J4

Inproheat Industries 680 Raymur Avenue Vancouver C.-B. V6A 2R1 (604) 254-0461 Succursales: #201, 11349-166A Street Edmonton Alberta T5M 3W4 (403) 451-4303 1300 St. James Street Winnipeg Manitoba (204) 772-

Fournisseurs

2875

Inservec Limited 250 Rayette Rd. Concord Ontario L4K 1B1 (416) 669-5111

Insta-Foam Products Inc. 1500 Cedarwood Dr. Joliet IL 60435 (815) 741-6800 **Agent: Insta-foam Products** P.O. Box 21 Etobicoke Ontario M9C 4V2 (416) 622-6844

Instrumentation & Control Systems Inc. 520 Interstate Rd. Addison IL 60101 (312) 543-6200

Instruments Champagne Int'l. 53-15th Street Roxboro P.Q. H8Y 1N7 (514) 684-3196

Insul-Coustic Inc. 2766 Fenton Road Box 925 R.R. #5 Ottawa Ontario K1G 3N3 (613) 822-2225 TELEX 053-4592 Succursale: 930 Rue Begin St. Laurent P.Q. H4M 2N5 (514) 337-2151 TELEX 05-824004

Insul-Glass Limited Box 5100, Stn. 'F' Ottawa Ontario K2C 3G8 (613) 226-4111

International Water Saver Inc. P.O. Box 452 Wellington Ontario K0K 3L0

Intertechnology Limited 1 Scarsdale Road Don Mills Ontario M3B 2R2 (416) 445-5500 Succursales: 3869 Boul Des Sources Dollard Des Ormeaux Quebec H9B 2A2 (514) 683-0930 856 Connaught Ave. Ottawa Ontario K2M 5M6 (613) 920-5669 Suite 3040 Bow Valley Square II Calgary Alberta T2P 2W7 (403) 265-8552 Suite 180 10751 Shellbridge Way Richmond C.-B. V6X 2W8 (604) 270-9538

Intralec PO Box 519 Thornhill Ontario L3T 4A2 Toronto (416) 669-1150 INWATS 1-800-268-0776

IRD Mechanalysis Limited 333 Barton Street East Stoney Creek Ontario L8E 2L1 (416) 662-7577

Isolation Systems 1631 The Queensway Toronto Ontario M8Z 5Y4 (416) 259-5401

Isometals Inc. 1720 Cunard Chomedy Laval P.Q. H7S 2B2 (514) 687-1341

ITT Fluid Products Canada 55 Royal Road Guelph Ontario N1H 1T1 (519) 821-1900 Succursales: 235 Cote Vertu bureau 138 Montreal Quebec H4N 1C8 (514) 336-7660 3335-23rd St. N.E. Calgary Alberta T2E 6V8 (403) 230-1426 #200-1294 Border St. Winnipeg Manitoba R3H 0M7 (204) 633-6296

ITT Reznor McKenley Ave. Mercer PA 16137 (412) 662-4400 Représentants: **A.G. Hubert & Assoc. Inc.** #10 Sideroad R.R. #5 Milton Ontario L9T 2Y3 (416) 878-0596

ITT Vulcan Electric Kezar Falls Maine 04047 (207) 625-3231 Distributeurs: **Elkon Electrical Co., Ltd.** 1961-55e Ave. Dorval Quebec H9P 1G9 (514) 636-0510 **Elkon Electrical Co. Ltd.** #3-490 McNicoll St. Willowdale, Toronto Ontario M2H 2E1 (416) 497-2842

J

J-Tek 1366 Spruce St. Winnipeg MB R3E 2V7 (204) 774-2571

J.H. Lock and Sons Limited 150 Perth Ave. Toronto Ontario M6P 3X4 (416) 531-1186 Succursales: Windmill Place 1000 Windmill Road Dartmouth Industrial Park, Burnside Dartmouth N.-E. B3B 1L7 (902) 469-6642 TELEX 019-22639 661 Rose de Lima Montreal Quebec H4C 2L7 (514) 931-7254 TELEX 05-267504 2907-18th Street, N.E. Calgary Alberta T2E 7K5 (403) 276-9944 TELEX 038-25546 Cory Lock Ltd. 278 Olafson Avenue Richmond C.-B. V6X 2R3 (604) 273-1531

Jacobs & Thompson Inc. 89 Kenhar Drive Weston Ontario M9L 2R3 (416) 749-0600 Succursale: 2465 de la Province Longueuil Quebec J4G 1G3 (514) 677-9166

Jo-Bell Products Inc. 5456 West 111th Street Oak Lawn IL 60453 (312) 425-0240 Distributeurs: **A.M. Tower Inc.** 25 Ave. Westminster sud Montreal, Quebec H4X 1Y6 (514) 481-0221 **Hydrofio Eqpt. Specialties Ltd.** 4917-99th St. Edmonton Alberta T6E 4Y1 (403) 437-1166 **Hydrofio Eqpt. Specialties Ltd.** 4216-10th St. N.E. Calgary Alberta T2E 6K3 (403) 276-8896

John Brown Engineering Clydebank Dunbartonshire Scotland G81 1YA (041) 952-2030 Agent: 20 Victoria Street Suite 505 Toronto Ontario M5C 2M8 (416) 364-3755

John C. Ernst Co. 171 Ridgedale Ave. Morristown NJ 07960 (201) 539-0300 Représentants: **Higginson Equipment Sales Ltd.** 1131 Pettit Road Burlington Ontario L7R 3Z4 335-2211

John C. Preston 500 University Avenue 10th Floor Toronto Ontario M5G 1V7 (416) 598-3540

John Wood 101 Hanson St. Toronto Ontario M4C 1A2 (416) 691-9100 Branch: 3450 Wellington Ave. Vancouver C.-B. V5R 4Y4 (604) 960-8044

Johnson Controls Limited Control Prod. Div. 929 Warden Ave. Scarborough Ontario M1L 4C6 755-1137 Succursale: 441 boul. LeBeau Montreal P.Q. H4N 1S2 (514) 331-7121 **Agents: Hasick Agencies Ltd.** 33 Colleen Cresc. S.W. Calgary Alberta T2V 2R4 (403) 252-7398 **Hasick Agencies Ltd.** 205-3755 W. 6th Ave. Vancouver C.-B. V6R 1T9

Johnson Controls Ltd. Systems & Services 120 Bermondsey Road Toronto Ontario M4A 1X6 (416) 757-2821

Johnson Corporation 805 Wood St. Three Rivers MI., U.S.A. 49093 (616) 278-1715 Représentants: **General Equipment Ltd.** 15 East 4th Avenue Vancouver C.-B. V5T 1G1 (604) 876-8881 **Calgary** (403) 423-4488 **Edmonton** (403) 252-9941 **Saskatoon** (306) 525-5264 **Winnipeg** (204) 453-4745 **Dry-Con Inc.** 840 Ave. Halpern Dorval Quebec H9P 1G6 (514) 636-1007 **Rexdale** Ontario (416) 675-7008

Johnson Paterson Ltd. 210 Denison St. Markham Ontario L3R 1B6 499-4822

K

Kahlsico Int'nl. Corp. P.O. Box 947 California 92022 (714) 444-2158 Distributeurs: **MSE Engineering Ltd.** 265 Canarctic Dr. Downsview Ontario M3J 2N7

Kahn and Company 885 Wells Road Wethersfield CT 06109 (203) 529-8643 Représentants: **Arthur S. Leitch** 999 William Street Midland Ontario L4R 4L7 (705) 526-5496

Kaigio Electronics Co. Inc. 6584 Ruch Rd. E. Allen Twp. Bethlehem PA 18017

Kathabar Systems Box 791 New Brunswick NJ 08903 (201) 356-6000 Distributeurs: **Western Air Conditioning Ltd.** 10441-123rd St. Edmonton Alberta T5N 1N8

Keene Lighting 455 Dobbie Dr. Cambridge Ontario N1R 5X9 (519) 623-8820

KeepRite Inc. 44 Elgin St. Brantford Ontario N3T 5PA (519) 753-8471 Succursales: 1777 West 8th Ave. Vancouver C.-B. V6J 1V8 (604) 738-0611 TELEX 04-51697 11434-168 St. Edmonton Alberta T5M 3T9 (403) 453-5155 TELEX 037-3725 2320-35th Ave. N.E. Calgary Alberta T2E 6S9 (403) 277-9688 TELEX 038-26753 210-3111 Portage Ave. Winnipeg Manitoba R3K 0W4 (204) 888-2533 TELEX 07-57433 1030 Clarke Side Rd. London Ontario N6A 4P4 (519) 451-0230 TELEX 064-5664 2289 Fairview St. Burlington Ontario L7R 2E3 (416) 637-8241 150 Consumers Rd. Toronto Ontario M2J 1P9 (416) 492-1444 TELEX 06-966727 côte Vertu Montreal P.Q. H4R 2B7 (514) 337-8040 TELEX 05-825881 80 Colonnade Rd. Ottawa Ontario K2E 7L2 (613) 226-7813 65Y Akerley Blvd. Dartmouth N.E. B3B 1RZ (902) 463-6670 TELEX 019-31604

Kelley Company Inc. 6720 N. Teutonia Ave. Milwaukee Wisconsin, U.S.A. 35209 (414) 352-1000 Succursale: Roger A. Kent Ltd. 1080 Fewster Dr., Unit 2 Mississauga Ontario L4W 2T2 (416) 625-8146

Kenscott Limited 2341A Keele Street Toronto Ontario M6M 4A3 245-4055

Kerdon Mfg. Ltd. 76 Tidefall Dr. Agincourt Ontario M1W 1J2 (416) 497-3276

Kerr Controls Limited P.O. Box 1500 24 Court Street Truro N.-E. B2N 5V2 (902) 895-9281 Succursales: 3607 Strawberry Hill Halifax N.-E. B3K 5A8 (902) 455-7248 81 MacAulays Drive Sydney N.-E. B1P 3Z8 (902) 539-2660 61 Halifax Street P.O. Box 2155, Postal Stn. A. Moncton Nouveau-Brunswick E1C 8J1 (506) 855-5741 386 Rothesay Ave. Saint Jean Nouveau-Brunswick E2J 2C3 [506) 693-4170 35 Maple Valley Road Corner Brook Terre-Neuve A2H 3C4 (709) 634-5323 683 Water Street Terre-Neuve A1C 2R6 (709) 753-1670

King Co. 1001-21st Ave. N.W. P.O. Box 287 Owatonna Minnesota 55060 (507) 451-3770 Distributeurs: **McCulloch Engineering Ltd.** P.O. Box 455 Bolton Ontario L0P 1A0 (416) 857-3200 **Henlex Inc.** 1300 Jules Poitras St. Laurent Quebec H4N 1X8 (514) 337-6893

Kingman Industries 3133 Sumner Avenue Burnaby C.-B. V5G 3E3 (604) 435-8175

Kleen-Flo Tumbler Industries 75 Advance Blvd. Brampton Ontario L6T 4N1 (416) 793-4311 Succursales: 1977 Notre-Dame de Fatima Duverney Quebec H7G 4R9 (514) 382-6713 2196 Douglas Road Burnaby C.-B. V5C 5A7 (604) 294-8661

Klockner Moeller Ltd. 3525 Nashua Dr. Mississauga Ontario L4V 1R1 (416) 677-2851 Succursales: 915 boul. Pierre Bertrand Quebec Quebec G1M 2E7 (418) 681-8163 9386 boul. Viau St. Leonard Quebec H1R 3B5 (514) 325-4307 372 rue McArthur Ville St. Laurent Quebec H4T 1X8 (514) 739-1906 455 Milner Ave. Scarborough Ontario M1B 2K4 (416) 298-6440 58 Bra-

malea Rd. Bramalea Ontario L6T 3S6 (416) 791-1722 144-146 South Service Road Stoney Creek Ontario L8E 3H6 (416) 560-0511 1641 Dublin Ave. Winnipeg Manitoba R3H 0G9 (204) 633-6140 7008K-5th St. S.E. Calgary Alberta T2H 2G3 (403) 253-0395 875 East Cordova St. Vancouver C.-B. V6A 3R2 (604) 251-2241

Konus Systems Inc. Suite 144 2121 Newmarket Pkwy. Marietta Georgia 30067 (404) 955-9335 Représentants: **QM Energy Systems Ltd.** P.O. Box 1868 975-3rd Ave. Prince George C.-B. (604) 563-3604 **Agent: Thermaco Engineering Svc. Ltd.** P.O. Box 569 Streetsville Ontario L5M 2C1 (416) 821-9700

Koolshade Corporation 722 Genevieve St. P.O. Box 210 Solana Beach California Distributeurs: **Window Insulation Specialists Co.** 1662 Bonhill Rd. #15 Mississauga Ontario L5T 1E1 671-2242 Représentants: **Sungard** 70 Nebo Road, Unit 4 Hamilton Ontario

KSM Canada Ltd. 425 Attwell Dr. Rexdale Ontario M9W 5C4 (416) 675-3650

L

L-K Metal Products Co. Ltd. 1595 Lincoln Rd. P.O. Box 1180 Windsor Ontario N9A 6R1 (519) 256-1861

Lakeshore Electric Corp. 205 Wills St. Bedford Ohio 44146 (216) 232-0200 Distributeurs: **Sytrolec Controls Ltd.** 5171 Amiens Montreal N. Quebec H1G 3G4 (514) 324-8991

Lakewood Stove Co. Ltd. Box 489 Bobcaygeon Ontario K0M 1A0 (705) 738-2349

Land Instruments Inc. Fox & Main St. Tullytown PA 19007 (215) 943-7882 Distributeurs: **Thermo Kinetics** 69 Westmore Dr., Unit 7 Rexdale Ontario M9V 3Y6 (416) 741-5794

Lawson Taylor Inc. 42 Laird Drive Toronto Ontario M4G 3T2 (416) 425-4244

Leader Fan Ind. Ltd. 10 Dansk Court, Unit 9 Rexdale Ontario M9W 5T8 (416) 675-1477

Leco Instruments Ltd. 5151 Everest Dr. Mississauga Ontario L4W 2R2 (416) 624-6933 Branch: 650 Rue Giffard Longueil Quebec J4G 1T8 (514) 651-5026

Leeds & Northrup Canada 41 Constellation Court Rexdale Ontario M9W 1K4 (416) 675-7700 Succursales: #104-2845-23rd St. N.E. Calgary Alberta J2E 7A4 (403) 230-1878 3929 boul. Taschereau St. Hubert P.Q. J4T 2G5 (514) 861-2815

Leeson Electric Corp. P.O. Box 241 Grafton WI 53024 (414) 377-8810 Succursale: 1222 Aimco Boulevard Mississauga Ontario L4W 1B2 (416) 625-5444

Lennox Industries (Canada) Ltd. 400 Norris Glen Road Etobicoke Ontario M9C 1H5 (416) 621-9302 Succursales: 3916-70th Avenue South East Calgary Alberta T2H 1X8 (403) 279-7577 9751 Van Horne Way Richmond C.-B. B6X 1W4 (604) 273-7704 8904-18th Street Edmonton Alberta T6C 4G1 (403) 464-1555 969 Sherwin Road Winnipeg Manitoba R3H 0T8 (204) 633-0299 1020 Rue Beaulac St. Laurent P.Q. H4R 1R7 (514) 336-8440 Bay 113A 2535 Blackwell Street Ottawa Ontario K1B 4E4 (613) 745-1527 10 Akerley Blvd. Suite #4 Dartmouth N.-E. B3B 1J4 (902) 463-9476 145 The West Mall Etobicoke Ontario M9C 1C3 (416) 622-0915

Leonard Electric (1961) Limited 1008 Rangeview Rd. Mississauga Ontario L5E 1H3 (416) 274-3454

Les Industries 1035 Panneton Sherbrooke Que. J1K 2B3 (819) 563-7331

Leslie International Unit C-10, 1515 Matheson Blvd. Mississauga Ontario L4W 2P5 (416) 625-5486 Représentants: **Olympic International Agencies Ltd.** 1591 Bowser Avenue North Vancouver C.-B. V7P 2Y4 (604) 987-2291 TELEX 04352543 **Cth Instruments (Western) Ltd.** 8909-20th Street Edmonton Alberta T6C 4J5 (403) 467-1809 TELEX 03741668 **Preston Phipps Equipment Ltd.** 315 Bering Ave. Toronto Ontario M8Z 3A5 (416) 239-2315 TELEX 06984566 **Mentec Industrial Equipment Ltd.** 6535 Millcreek, Unit 45 Mississauga Ontario L5N 2M2 (416) 821-9600 TELEX 06218581 **Robertson White Engineering Ltd.** 20 Victoria Street, Suite 505 Toronto Ontario M5C 2M8 (416) 364-3755 TELEX 06-52485 **B Fortin (1977) Inc.** 5165 Metropolitain E Montreal Quebec H1R 1Z7 (514) 324-5283 TELEX 05828633 **Cth Instruments Central Ltd.** 156 St. Denis St. Lambert P.Q. J4P 2G2 (514) 671-9396 TELEX 0527377 **Cth Instruments Ltd.** 10 Akerley Blvd. Suite 36 Dartmouth N.-É. B3B 1J4 (902) 469-6832 TELEX 01931426 **Preston Phipps Equipment Ltd.** 1149 Vanier Rd. Unit 2 Sarnia Ontario N7S 3Y6 (519) 344-9791 **Preston Phipps Equipment Ltd.** Ottawa Railway Station 200 Tremblay Road Ottawa Ontario K1G 3H5 (613) 236-5774 TELEX 0534132 **Mentec Industrial Equipment Ltd.** 1149 Vanier Rd., Unit 3 Sarnia Ontario N7S 3Y4 (519) 336-9512

Levell Electronics Ltd. Moxon Street Barnet Herts, England EN5 5SD 01-449-5028

Levitt-Safety Limited 33 Laird Drive Toronto Ontario M4G 3S9 (416) 425-8700 Succursales: Kitchener Ontario (519) 894-1770-1 Ottawa Ontario (613) 225-9550 Sudbury Ontario (705) 560-2445-6 Thunder Bay Ontario (807) 623-6484 Sarnia Ontario (519) 336-8530 Stoney Creek Ontario (416) 662-2905 London Ontario (519) 451-3010 St. Catherines Ontario (416) 685-7397 Winnipeg Manitoba (204) 633-7228 Edmonton Alberta (403) 436-3730 Fort McMurray Alberta (403) 743-8573 Calgary Alberta (403) 243-4273 Vancouver C.-B. (604) 879-4561 Prince George C.-B. (604) 563 1619 Regina Saskatchewan (306) 543-7455 Dorval Que. (514) 636-9011 Sept Iles Que. (418) 962-2541 Arvida Que. (418) 548-3150 Moncton N.B. (506) 382-2559 Dartmouth N.-É. (902) 463-1303 St-jean T.-N. (709) 722-5690

Libbey Company, W.S. 1 Mill Street Lewiston Maine, U.S.A. 04240 (207) 784-6961 Distributeurs: **Corepro Ltd.** 8114 Trans Canadienne St. Laurent Quebec H4S 1M5 (514) 337-3911 **Teah Insul-Fabricators Ltd.** 3815-67 Ave. N.E. R.R. #6 Calgary Alberta T2M 4L5 (403) 285-3727

Liebert Corporation 1050 Dearborn Drive P.O. 29186 Columbus Ohio 43229 (614) 888-0246 Distributeurs: **Jo-Ad Industries** 76 boul. Hymus Pointe Claire Quebec H9R 1E3 (514) 695-0650

Lightlux Prod. Inc. 783 Lawrence Ave. W. Toronto Ontario M6A 1C2 781-9329

Lightoller Canada Inc. 3015 Louis A. Amos Lachine P.Q. H8T 1C4 (514) 636-0670 Succursales: 1739 Orangebrook Court Pickering Ontario L1W 3G8 (416) 831-2525 17303-105 Avenue Edmonton Alberta T5S 1H2 (403) 483-1476 2736 S.E. Marine Drive Vancouver C.-B. V5S 2H1 (604) 437-0417

Liquiflame 50 Ashwarren Road Downsview Ontario M3J 1Z5 (416) 630-1240

Liquitrol Ltd. 4186 Courtrai #182 Montreal Que. H3S 1C3 739-1432

Lisi Aero Guide Inc. 7747 Valdombre St. Leonard Que. H1S 2V6 (514) 254-7533 Succursales: 1001 Rte De L'Eglise Ste. Foy Que. G1V 3V7 (418) 656-6007 415 Racine E Chicoutimi Que. G7H 1S8 (418) 549-0481

Lisle-Metrix Ltd. 49 Sheffield St. Toronto Ontario M6M 3E5 (416) 249-9151 Représentants: **Quontime Inc.** C.-P. 201 Succ. Snowdon Montreal Quebec H3X 3T4 (514) 937-3914-5 TELEX 055-66268 **Quontime Inc.** Post Office Box 952 Armdale Postal Station Halifax N.-É. B3L 4K9 (902) 425-5900 **Sarnia Piping Specialties Limited** 510 Williams Drive Chippewa Industrial Park Post Office Box 2018 Sarnia Ontario N7T 7L1 (519) 336-8820 TELEX 064-76210 **Ramsey Lake Industrial Limited** Walden Plaza, Unit #9 Post Office Box 158 Lively Ontario P0M 2E0 (705) 692-4734 TELEX 067-7156 **Pyramid Measurement & Controls Ltd.** 364-B East Esplanade North Vancouver C.-B. V7L 1A4 (604) 986-1568 TELEX 043-52559 **CB Engineering Limited** #1-6320-11th Street S.E. Calgary Alberta T2H 2L7 (403) 259-6220 TELEX 038-24812 **CB Engineering Limited** 308-9945-50th Street Edmonton Alberta T6A 0L4 (403) 465-9370 TELEX 037-43133

Loewen Millwork Box 2260 Steinbach Manitoba R0A 2A0 (204) 326-6446 Succursales: 2642 Millar Ave. Box 5027 Saskatoon Saskatchewan S7K 4E3 (306) 652-2095 11930-115 Ave. Edmonton Alberta T4G 0L9 (403) 452-3750 3915-78 Ave. S.E. Calgary Alberta T2C 2J6 (403) 279-5046

Longhill Combustion Products Ltd. 95 Newkirk Rd. S. Richmond Hill Ontario L4C 2C6 (416) 883-1555

Loren Cook Company 2015 East Dale Street Springfield Missouri 65803 (417) 869-6474 Représentants: **Air Distribution Equipment Inc.** 10780 Boul. Pascal Gagnon Montreal-Nord Quebec H1P 1Z8 (514) 324-1471 **Cometal Inc.** 11 Rue Dumais St. Romuald CTE-Levis Quebec G6V 7M5 (418) 839-8831 Succursales: KAV-AIR Products #81 Glencameron Road Thornhill Ontario L3T 2C0 (416) 881-9990 **Diamond Mechanical Distributors** Suite 4, Bedford Trade Mart 99 Rocky Lake Drive Bedford N.-É. B4A 2T3 (902) 835-7359 **Kenco Sales** P.O. Box 839 Rothesay Nouveau-Brunswick E0G 2W0 (506) 847-7597 **J.R. Stephenson Ltd.** 555 Madison Street Winnipeg Manitoba R3H 0I6 (204) 775-8561 **J.R. Stephenson Ltd.** 1075 Mcdonald Street Regina Saskatchewan S4N 2X9 (306) 569-0654 **Sanitherm Engineering Ltd.** 767 Powell Street Vancouver C.-B. V6A 1H5 (604) 253-4341 **Sinclair Supplies Ltd.** 10820-119 Street Edmonton Alberta T5L 4J6 (403) 452-3110 **Sinclair Supplies Ltd.** 523 Cleveland Cres. SE Calgary Alberta T2G 4R8 (403) 243-7800 **R.L. Fulton Company** P.O. Box 12060 Station A St-jean Terre-Neuve A1B 3T5 (709) 753-3760 **J.R. Stephenson Ltd.** 401-44th St. East Saskatoon Saskatchewan S7K 0V9 (306) 242-1231

Luxo Lamp Ltd. 30 Place Sicard Ste-

Therese Quebec J7E 3X6 (514) 430-5051 Branch: 32 Voyager Court South Toronto Ontario (416) 675-6310

M

M.H. Rhodes 99 Thompson Road Avon Connecticut 06001

Mac Victor Mfg. P.O. Box 1729, 840 Florence Ave. Concord N.C. 28025 (704) 786-7162

MacDonald Process Equipment Ltd. 133-2 The West Mall Etobicoke Ontario M9C 1C2 (416) 626-7300

MacLeod & Grant Ltd. P.O. Box 809, 106 Mackay St. Stellarton N.-E. B0K 1S0 752-7522

Magnor Inc. 190 Boul. Industriel Boucherville Québec J4B 2X3 (514) 655-1344

Makinson Winchester Inc. 5100 Route St. Francois St. Laurent Quebec H4S 1J8 (514) 334-1050 **Agents: Donaldson, Pyrch & Hume Ltd.** 3920 Grant Street Burnaby C.-B. V5C 3N3 **Donaldson, Pyrch & Hume Ltd.** 595 Ongenman Road, Bay 9 Prince George C.-B. **C.P.H. Industries Div.** #16, 1935-30th Ave. N.E. Calgary Alberta T2E 6Z5 **D.P.H. Industries Div.** 8815-50th Avenue Edmonton Alberta T6E 5H4 **Paul Greenough Sales** P.O. Box 8151, Station A, Halifax N.-É. B3K 5L9 **Warco Specialties Inc.** 1243A Kingsway Vancouver C.-B. V5V 3E2

Mannesmann Demag Ltd. 2400 Royal Windsor Drive Mississauga Ontario L5J 1K7 (416) 823-4500 Succursales: 7720 Anvil Way Surrey C.-B. V3W 4H7 (604) 596-7422 2700 Sabourin St. Laurent P.Q. H4S 1M2 (514) 336-5556 199 Omands Creek Blvd. Winnipeg Manitoba R2R 1V9 (204) 632-9906

Manning Technologies Inc. 100 Technology Circle Scotts Valley CA 95066 (408) 438-3900 Représentants: **Fielding Crossman & Assoc.** 606 Gordon Baker Road Willowdale Ontario M2H 3B4 (416) 497-9111 **John Meunier, Inc.** Case Postale 70, Succ. Cartierville Montreal P.Q. H4K 2J4 (514) 334-7230 **Sealand Sales Ltd.** 2960 West 4th Ave. Vancouver C.-B. V6K 1R4 (604) 736-9744

Marathon Electric 100 E. Randolph St. Wausau Wisconsin 54401 (715) 675-3311 Représentant: **Phelan Brothers** 55 Healey Rd. Bolton Ontario L0P 1A0 (416) 857-2720

Margaux Controls Canada Inc. 1200 Aerowood Drive, Unit #7 Mississauga Ontario L4W 2S7 (416) 624-5722 Succursale: P.O. Box 3510, Station B Fredericton Nouveau-Brunswick E3A 5J6 (506) 454-4201

Mark Hot Inc. 400 Place Trans-Canada Longueuil Quebec J4G 1N9 (514) 670-4050 Succursales: 235 Commercial Drive Vancouver C.-B. V5L 4X1 (604) 253-8441 TELEX 04-51426 4009-4th Street S.E. Calgary Alberta T2G 2W4 (403) 287-1572 TELEX 038-24594 9232-27th Avenue Edmonton Alberta T6N 1B2 (403) 463-1133 TELEX 037-2582 1129 Empress Street Winnipeg Manitoba R3E 3H1 (204) 783-7051 TELEX 07-57514 6471 Northam Drive Mississauga Ontario L4V 1J2 (416) 677-6500 TELEX 06-968608 ZENITH: 63220 20, rue St-Jean Québec P.Q. G1R 1N6 (418) 524-3074 1445 Woodroffe Avenue Nepean Ontario K2G 1W1 (613) 226-6726 TELEX 053-3814 1600 Bedford Highway, Suite 212 Sunnyside Place Bedford N.-É. B4A 1E8 (902) 835-7116 (902) 835-7117 TELEX 019-22554

Markel Corporation P.O. Box 752 Norristown PA 19404 (215) 272-8960 Succursale: Marflex Limited 2410 Dunwin Drive Mississauga Ontario L5L 1J9 (416) 828-0220

Markko Construction 195 Kennedy Road South, Suite 309 Brampton Ontario L6W 3H2 (416) 453-4325

Markland Specialty Engineering Ltd. Box 145 Etobicoke Ontario M9C 4U2 (416) 625-0930 **Agent: Pyramid Measurement & Controls Ltd.** 364-B East Esplanade North Vancouver C.-B. V7L 1A4

Marsh Instrument Canada 397 Humberline Dr. #8 Rexdale Ontario M9W 5T5 (416) 675-1727 Succursale: 4133-98th Street Edmonton Alberta T6E 5N5 (403) 463-7055

Martin Oakwood Ltd. 3610 Nashua Drive Mississauga Ontario L4V 1L2 (416) 677-8900

Masonelian Canada Ltd. 1135 North Service Road East Oakville Ontario L6H 1A7 (416) 844-2690 Succursales: 212-6025 12th Street S.E. Calgary Alberta T2H 2K1 (403) 255-4496 4922-89 St. Edmonton Alberta T6E 5K1 (403) 465-7882 Représentants: **Controvalve Inc.** P.O. Box 43, Stn. A Fredericton N.B. (506) 455-1111 **Controvalve Equipment Inc.** 1610-B Provencher Grossard Quebec J4W 2T9 (514) 465-3330 **Controls Equipment** 2410 Tedlo Street Mississauga Ontario L5A 3V3 (416) 275-1571 **Controls Equipment** 317 Adelaide St. London Ontario N5Z 3L3 (519) 681-9390 **Fintec Ltd.** 2410 Tedlo St. Mississauga Ontario L5A 3V3 (416) 270-6051 **Northern Columbia Process & Equipment Ltd.** 1234 Marine Drive Vancouver C.-B. V7P 1T2 (604) 987-7194

Material Control, Inc. One Smoke Tree Plaza. Suite 115 North Aurora Illinois 60542 (312) 892-4275

Matheson P.O. Box 89 (530 Watson St. E.) Whitby Ontario L1N 5R9 (416) 668-3397 Succursale: 12143-66th St. Edmonton Alberta T5B 4K6 (403) 471-4036

Maxon Corporation 201 East 18th Street Muncie Indiana 47302 (317) 284-3304 Représentants: **Thermal Products Ltd.** 1160 Blair Rd., Suite 118A Burlington Ontario L7M 1K9 (416) 335-0540 TELEX 061-8966 **Western Air Conditioning Ltd.** #15, 1916-30th Ave. N.E. Calgary Alberta T2E 7B2 (403) 230-2101 TELEX 038-22738 **Thermequip Limited** 8019 Rue Alfred Ville D'Anjou Montreal P.Q. H1J 1J3 (514) 354-4811 TELEX 05-829636 **Thermal Products Ltd.** 6470 Viscount Rd. Mississauga Ontario L4V 1H3 (416) 678-7780 TELEX 06-983521 **Thermal Products Ltd.** 347 Sherbrooke St., Suite 301 North Bay Ontario P1B 2C1 (705) 476-5671 TELEX 067-76201 **Western Air Conditioning Ltd.** 10441 123rd St. Edmonton Alberta T5N 1N8 (403) 488-7268 TELEX 037-2743

MCC Powers 6700 Finch Ave. W., Suite 600 Rexdale Ontario M9W 5P2 (416) 675-1810 Succursales: 150 Skyway Ave. Rexdale Ontario M9W 4Y9 (416) 675-3944 428 Millen Road, Unit 26 Stoney Creek Ontario L8E 3N9 (416) 560-3837 2410 Holly Lane Ottawa Ontario K1V 7P1 (613) 733-9781 8231 de l'Industrie, Anjou Montreal Quebec H1J 1X8 (514) 352-9220 2745 Dutch Village Road Halifax N.-E. B3L 4G7 (902) 453-4311 1522 St. James Street Winnipeg Manitoba R3H 0L2 (204) 774-3411 15140-128th Avenue Edmonton Alberta T5V 1A8 (403) 470-1214 3740D-11A Street N.E. Calgary Alberta T2E 6M6 (403) 230-3161 8576 Fraser Street Vancouver C.-B. V5X 3Y3

Measurex Inc. 981 Pierre Dupuy, bureau 136 Longueuil Quebec J4K 1A1 (514) 651-2410 Succursale: Ste. 202-20216 Fraser Hwy. Langley C.-B. V3A 4E6 (604) 534-1466

Mercoid Corporation 4201 Belmont Avenue Chicago IL 60641 (312) 736-2100 Distributeurs: **Davis Controls Limited** 4251 Dundas St., West—PO Box 160 Islington Ontario M9A 4X2 (416) 233-3211

Meriam Instrument 10920 Madison Avenue Cleveland Ohio 44145 (216) 281-1100 Représentants: **Peacock, Inc.** C.P. 1040, Succ. A Montreal Quebec H3C 2X5 **Peacock, Inc.** 2715 18th St. NE Calgary Alberta T2E 7E6 **Peacock, Inc.** 3905 101st St. Edmonton Alberta T6E 0A4 **Peacock, Inc.** 1180 Aerowood Dr. Mississauga Ontario L4W 1Y5 **Peacock, Inc.** 2325 Burrard St. Vancouver V6J 3J2

Merix Chemical Co. 2234 E. 75th St. Chicago Illinois 60649 (312) 221-8242

Mesam Limited 85 Glen Cameron Rd. Thornhill Ontario L3T 1N8 (416) 889-9540

Met-Pro Corporation 70 Arkay Drive Hauppauge NY 11788 (516) 435-0530 Représentants: **Alloycraft** 51 Ave. Hillside Westmount Québec H3Z 1V8 (514) 935-4653

Metex Corporation Ltd. 12 Penn Drive, Unit #1 Weston Ontario M9L 2A9 (416) 749-1210

Metritape, Inc. 33 Bradford St. Concord MA 01742 (617) 369-7500 Représentants: **Baker Instruments Ltd.** 118 Doncaster Avenue Thornhill Ontario L3T 1L3 (416) 889-8642 **K & A Equipment & Controls** Box 3430 Station B St-jean N.-B. E2M 4X9 (506) 672-1035 **Atlanta Heat & Transfer Co. Ltd.** P.O. Box 366 Bedford N.-E. B4A 2A1 (902) 835-5090 **Canadian Dynamics Nova Ltd.** 217 East 16th Avenue Vancouver C.-B. V5T 2T5 (604) 872-8106 **Canadian Dynamics Nova Ltd.** #3-227 14th St. N.W. Calgary Alberta T2N 1Z6 (403) 283-2813

Metropolitan Refining Co. Inc. 50-23 23rd Street Long Island City New York 11101 (212) 729-7200

Micronet Limited 1313 Hollis St. PO Box 7066 Halifax N.-E. B3K 5J4 (902) 429-3024 TELEX 019 22628

Midland Ross of Canada 1735 Kipling Ave. Weston Ontario M9R 2Y8 (416) 247-7456

Mikron Instrument Co. 445 W. Main St. Wyckoff NJ 07481 (201) 891-7330 Représentants: **Tubefit Ltd.** 109 Eddystone Ave. Downsview Ontario M3N 1H5 (416) 743-1661

Milton Roy Industries Ltd. 300 Milroy Drive, P.O. Box 1055 Peterborough Ontario K9J 7A9 (705) 743-6550 Succursale: 80 Galaxy Boulevard Rexdale Ontario M9W 4Y8 (416) 675-5656 Représentants: **A.G. Dunbar Company Limited** 2745 Dutch Village Road Halifax N.-E. B3L 4G7 (902) 455-5421 **Pesco Sales Limited** 3260 Rue Sartelon Montreal Quebec H4R 1E3 (514) 331-6953 **MacKay-Morton Limited** 50 Myrtle Street Winnipeg Manitoba R3E 2R2 (204) 786-5891 **Pembina Controls Limited** 14-401-45th Street West Saskatoon Saskatchewan

Fournisseurs

S7L 5Z9 (306) 242-1993 **Zazula Process Equipment Limited** 1526-10th Avenue South West Calgary Alberta T3C 0J5 (403) 244-0751 **Extech Systems Limited** 180, 3025-12th Street North East Calgary Alberta T2E 7J2 (403) 276-8911 **Extech Systems Limited** 1638 West 6th Avenue Vancouver C.-B. V6J 1R3 (604) 734-4211 **C.G. Industrial Specialties Limited** 8130 Ontario Street Vancouver C.-B. V5X 3E3 (604) 321-3111

Miniveil Ltd. Box 357 340 Ward Street Port Hope L1A 3W4 (416) 885-4015

Mitco Corporation 440 Somerville Avenue Somerville Mass. 02143 (617) 623-7950

Mitsubishi Electric 3030 East Victoria St. Compton CA 90221 (213) 537-7132 Représentants: **Zero Energy Products** 2218 Ave. C. North Saskatoon Saskatchewan S7L 6C3 (306) 665-2022 **Team West Energy Products** 10105 97th Ave., Suite 101 Grand Prairie Alberta T8V 0N5 (403) 539-5340

Modicon Canada Ltd. 1515 Matheson Blvd. B2 Mississauga Ontario L4W 2P5 (416) 624-1484 Succursales: 1515 Matheson Blvd. Unit B-10 Mississauga Ontario L4W 2P5 (416) 624-1484 TELEX 06-960285 8023 Argyll Road Edmonton Alberta T6C 4A9 (403) 468-6670 TELEX 037-42829 2045 West Broadway Vancouver C.-B. V6J 1Z6 (604) 738-2525 15 Chelwood Street Winnipeg Manitoba R3C 4A3 (204) 339-1666 121 E Jessop Avenue Saskatoon Sask. S7N 1H3 (306) 955-2400 504 Victoria Avenue Windsor Ontario N9A 4M8 (519) 254-1383 178 Queen Street South Kitchener Ontario N2G 1W3 (519) 578-2280 1850 Champlain Avenue Whitby Ontario L1N 6A7 (416) 571-1084 3869 Route des Sources bureau 200 Dollard Des Ormeaux Quebec H9B 2A2 (514) 683-0332 TELEX 05-8216815 298 Chantal Street Dieppe N.B. E1A 4X7 (506) 854-7910

Modine Manufacturing Co. 1500 Dekoven Ave. Racine WI. 53401 (414) 636-1200 Représentants: **1075 McDonald St,** P.O. Box 1580 Regina Saskatchewan S4P 3C4 (306) 569-0654

Modudata Systems Ltd. 7 Guardsman Road Thornhill Ontario L3T 2A1 (416) 222-2902/889-9139

Modular Windows of Canada Limited 112A Snidercroft Road Concord Ontario L4K 1B6 (416) 669-2222

Moldcast 2070 Autoroute Trans-canadienne Dorval Que. H9P 2N4 (514) 683-4210 **Agents: McDonald-Horsey Agencies Ltd.** 210-5720 MacLeod Trail South Calgary Alberta T2H 0J6 **McDonald-Horsey Agencies Ltd.** 9738-5 1st Ave., Suite 202 Edmonton Alberta T6E 0A6 **Design Lighting Inc.** 101-7080 River Rd. Richmond C.-B. V6X 1X5 **Loumond Sales Ltd.** 404-115 Bannatyne Ave. Winnipeg Manitoba R3B 0R3 **Kilbride Electrical Agency Inc.** 7001 Mumford Rd. Tower 2, Suite 3030 Halifax N.-E. B3L 4R3 **Vigilant Technical Sales Ltd.** P.O. Box 4483 (68 Mullock St.) St-jean T.-N. A1C 6C8 **N. Rutenberg Sales Ltd.** 215 Carlingview Dr., Unit 309 Rexdale Ont. M9W 5X8 **W.S. Sales Associates Ltd.** 29 Bayswater Ave. Ottawa Ont. K1Y 2E5 **W.S.B. Sales Associates Ltd.** 131 Sherryl Cr. North Bay Ontario P1B 8R8 **Lee Vantes P.T. Sales Inc.** 426 Victoria St. Lambert Que. J4P 2H9 **Luxtec Ltee.** 3885 boul. Hamel Québec Qué. G2E 3M3 **Isted Technical Sales Ltd.** Suite C, 123 Pinehouse Drive Saskatoon Sask. S7K 5W1 **Isted Technical Sales Ltd.** 7 Jupp Place Regina Sask. S4S 6R1

Moldow Dust Control Sys. Ltd. 5266 General Road, Unit 4 Mississauga Ontario L4W 1Z7 (416) 624-6242

Moore Industries Inc. 16650 Schoenborn St. Sepulveda CA 91343 (213) 894-7111 Représentants: **ARMATEK Controls Ltd.** 27 Fima Crescent Toronto Ontario M8W 3R1 (416) 251-3111 TELEX 0695-7689 **CB Engineering Ltd.** No. 1-6320 11th Street S.E. Calgary Alberta T2H 2L7 (403) 259-6220 TELEX 03-824812 **Advanced Control System Ltd.** 117-1625 Dublin Ave. Winnipeg Manitoba R3H 0W3 (204) 774-9444 TELEX 07-587555

Morval-Durofoam Limited 152 Birch Ave. P.O. Box 878 Kitchener Ont. N2G 4E1 (519) 579-6100 TORONTO (416) 823-7450 (416) & (705) 1-800-265-8935

Motorola Ltd. 3125 Steeles Ave. E. Willowdale Ont. M2H 2H6 (416) 499-1441

Mottpac Boilers Inc. 1028 Royal York Road Toronto Ont. M8X 2G4 (416) 231-8616

MTE 5385 Pare St. Montreal PQ H4P 1P9 (514) 342-1810 Succursales: 7585 Torbram Rd. Mississauga Ont. L4T 1H2 (416) 678-0567 1020 Powell Ave. Winnipeg Man. R3H 0H6 (204) 633-9135 4244-99th St. Edmonton Alta. T6E 5B3 (403) 462-4272 3353 Wayburne Dr. Burnaby C.-B. V5G 4L4 (604) 294-1154

Muirhead Engineering Ltd. 4750 Sheppard Ave E. Agincourt Ontario M1S 3V7 (416) 293-3666

Multi-Amp Corp. 4271 Bronze Way Dallas TX 75237 (214) 333-3201 Représentants: **Foulis Engineering Sales Ltd.** P.O. Box 1086 Fredericton NB E3B 5C2 (506) 455-6012 **Foulis Engineering Sales Ltd.** P.O. Box 1530 Halifax N.-E. B3J 2Y5 (902) 429-1530 **Foulis Engineering Sales Ltd.** P.O. Box 2490 St. Jean T.-N. A1C 6E8 (709) 368-6007 **Fraser, George M. Ltd.** 590 Ave. Meloche Dorval PQ H9P 2P4 (514) 636-9139 **Fraser, George M. Ltd.** 18-11 Progress Ave. Scarborough ON (416) 298-0008 **Progressive Agencies Ltd.** P.O. Box 405 Regina SK S4P 3A2 (306) 569-0411 **McCuaig. D.A. Agency Ltd.** 471 Warsaw Ave. Winnipeg MB R3M 3S7 (204) 284-3834 **Canadian Dynamics Nova Ltd.** P.O. Box 23526 Vancouver C.-B. V7B 1W2 (604) 872-8106 **Canadian Dynamics Nova Ltd.** #3-227 14th St. N.W. Calgary AB T2N 1Z6 (403) 283-2813

Multitrol Corp. Unit 19, 10 Planchet Road Maple Ontario L0J 1E0 (416) 669-5505

Multiver Ltée 436 Rue Bérubé Ville Vanier Québec G1M 1C8 (418) 687-0770

Myers Can. Ltd. F E. Box 38, 269 Trillium Dr. Kitchener Ontario N2G 3W9 (519)893-7565

N

N.A.P. Ltd. 9663-199 A Street Langley C.-B. V3A 4P8 (604) 888-1421 Succursale: 1040 Railway Ave. Kelowna C.-B. V1Y 7V8 (604) 762-5343

Napier-Reid Ltd. 10 Alden Rd., Unit 2 Markham Ontario L3R 2S1 (416) 475-1545

National Cellulose Corporation P.O. Box 45006 12315 Robin Blvd. Houston TX 77245-5006 (713) 433-6701 Succursale: 13385 Comber Way Surrey C.-B. V3W 5V8 (604) 591-5577 Représentants: **I.F. Industries** 1426 Wallace Road Oakville Ontario L6L 2Y2 (416) 827-6358

National Electric 4 Newbold Ave. Toronto Ontario M4L 2G7 (416) 964-8488

National Sonics Div of Xertex 250 Markus Blvd. Hauppauge NY 11787 (516) 273-6600 Représentants: **Brian Engineering Ltd.** 3-20 Steekle Place Kitchener Ontario N2E 2C3 (519) 893-7474 **880 Philip Street** Sarnia Ontario N7T 1Z6 (519) 337-7591 **736 Harold Crescent** Thunder Bay Ontario P7C 5H8 (807) 623-2155 2445 Rue Duncan Montreal 9 P.Q. 25 Shaft Road Rexdale Ontario (416) 248-0226 **P.O. Box 1131** 17 Bedford Trade Mart Bedford, Halifax N.-E. B0N 1B0 (902) 835-8322 **99 Rocky Lake Drive** Unit 17 Bedford N.-E. B4A 2T3 **1746 St. James Street** Winnipeg Manitoba R3H 013 (204) 632-5516 **9259-48th Street** Edmonton Alberta T6B 2R9 (403) 468-2123 **101-1135 64th Avenue, S.E.** Calgary Alberta T2H 2J7 (403) 255-4457 **1475 Boundary Road** Vancouver C.-B. V5K 4V2 (604) 291-2341 **BCA Industrial Controls, Ltd.** 9688 187th Street Surrey C.-B. V3T 4X5 (604) 888-4141 **#13 6115-4th Street, S.E.** Calgary Alberta T2H 2H9 (403) 253-1949

Nationwide Boiler Inc. 42400 Christy Street Fremont California 94538 (415) 490-7100

Neeco Industries 3077 Mainway Burlington Ontario L7R 4C5 (416) 827-8000

Neptune Meters 3526 Lakeshore Blvd. West Toronto Ontario M8W 1N7 (416) 259-4211 Succursales: 54 Wright Ave. Burnside, Dartmouth N.-E. B3B 1H3 (902) 463-6420 12455 Rue April Pointe aux Trembles Quebec H1B 5L8 (514) 645-7404 1500 Church Avenue Winnipeg Manitoba R2X 1G6 (204) 633-7086 3610 Manchester Road Calgary Alberta T2G 3Z5 (403) 243-2434 4085-2nd Avenue Burnaby C.-B. V5C 3X1 (604) 299-6222

Newport Electronics 630 E. Young St. Santa Ana CA 92705 (714) 540-4914 Représentants: **Webster Instruments** 1134 Aerowood Drive Mississauga Ontario L4W 1Y5 (416) 625-0600 880 Lady Ellen Place, Suite 3 Ottawa Ontario K1Z 5L9 (613) 725-0286 750 boul. Laurentien bureau, 115 St. Laurent P.Q. H4M 2M4 (514) 744-5829 #208 Campbell Center 200 Carnegie Drive St. Albert Alberta T8N 3K1 (403) 458-4669 4211 Kingsway, Suite 509 Burnaby C.-B. V5H 3Y6

Niagara Blower 405 Lexington Ave. New York NY 10174 (212) 697-6151

Nixon Plate Coils Vandorf Rd. East Gormley Ontario L0H 1G0 (416) 923-3746

North American Mfg. Co. 2005 Sheridan Dr. Buffalo NY 14223 (716) 874-1248

Northfab Systems (Canada) Ltd. 655 Industrial Rd., Unit 8 P.O. Box 2145 Cambridge Ontario N3C 1W4 (519) 653-7869

NovaVent North America 3550 Wolfedale Rd. Mississauga Ontario L5C 2V6 (416) 273-4640

Nu-Tech Glass Industries Reixinger Rd. P.O. Box 775 Niagara Falls Ontario L2E 6V6 (416) 295-4321

Nu-Tech Mktg. Systems 6295 Shawson Dr., Unit 2B Mississauga Ontario L5T 1H3 (416) 671-4121

Numatics 1450 N. Milford Rd. Highland MI 48031 (313) 887-4111 Succursale: Numatics Air Controls 363 Sovereign Rd. London Ontario N6M 1A3 (519) 452-1777

Fournisseurs

O

Ogontz Controls Company 141 Terwood Road P.O. Box 479 Willowgrove PA., U.S.A. 19090 (215) 657-4770 Représentants: **Pesco Sales Ltd.** 3260 Vartelon Montreal Quebec H4R 1E3 (514) 331-6953

Ohio Semitronics 1205 Chesapeake Ave. Columbus Ohio 43212 (614) 486-9561 Représentants: **CTH Instruments Ltd.** 156 Ave. Dennis St. Lambert Quebec J4P 2G2 **CTH Instruments (West) Ltd.** 8909-20 Street Edmonton Alberta T6P 1K8 (403) 467-1809 **Armatek Controls** 27 Firma Crescent Toronto Ontario M8W 3R1

OHM-Rite Electrical 181 Carlaw Avenue Toronto Ontario M4M 2S1 (416) 469-5555

Olivine Corp. 1015 Hilton Bellingham Wash., U.S.A. 98225 (206) 733-3332

Olman Instruments 445 Finchdene Sq. Scarborough Ontario M1X 1B7 (416) 298-6770 Succursale: 5780 Avenue Decelles, Suite 303 Montreal Quebec H3S 2C7 (514) 342-9433

Ontor 12 Leswyn Road Toronto Ontario M6A 1K3 (416) 781-5286 Succursales: 3300 boul. Cavendish, bureau 120 Montreal P.Q. H4B 2M8 (514) 489-8263 TELEX 055-66426 301-14th Street N.W., Suite 480 Calgary Alberta T2N 2A1 (403) 283-5909 TELEX 038-21609 5630-88th Street Edmonton Alberta T6E 5R8 (403) 468-1580 TELEX 037-3813 11575 Bridgeport Road Richmond C.-B. V6X 1T5 (604) 273-2982 TELEX 043-55770 345 N. Christina Street Sarnia Ontario N7V 1Z3 (519) 344-7444

Opcon 729-80th St. S.W. Everett Washington 98203 (206) 353-0900 Représentants: **Eltron Enterprises, Limited** 7583 Vantage Place Delta C.-B. V4G 1A5 (604) 946-1271 **N. Rutenberg Sales** R.R. 8, Edgemount Road Watford Ontario N0M 2S0 (519) 873-4132 **N. Rutenberg Sales Ltd.** Box 21, Site 4, 33 Mikkola Coppercliff Ontario P0M 1N0 (705) 692-5146 **N. Rutenberg Sales Ltd.** P.O. Box 1036 North Bay Ontario P1B 8K3 (705) 476-3387 **N. Rutenberg Sales Ltd.** 215 Carling View Dr., #309 Rexdale Ontario M9W 5X8 (416) 675-1298 TELEX 06-989277 **Ultra Precision Equip. Ltd.** 3285 Cavendish, 385 Montreal Quebec H4B 2L9 (514) 482-6715

Ordan Thermal Products 210 Don Park Rd. #Markham Ont. L3R 2V2 (416) 475-9292

P

P.H. Tech. Inc. C.P. 220 Levis Quebec G6V 6N8 (418) 833-3231 Représentants: **Celtech Inc.** Concord Ontario

P.S.C. Controls 1600 Monterey Laval Québec H7L 3S3 (514) 687-2710

Pacer Industries 1450 First Ave. Chippewa Falls WI., U.S.A. 54729 (715) 723-1141 Représentants: **Duncan Instruments, Ltd.** 122 Millwick Dr., Unit #3 Weston Ontario M9L 1Y6 (416) 742-4448

Pacific Technology 11825-120th Ave. N.E. P.O. Box 2249 Kirkland WA 98033 (206) 823-7100 Distributeurs: **A-C Systems, Inc.** 3186 Duval Road N. Vancouver C.-B. V7J 3E4 (604) 980-6612

Paco Pumps 845-92nd Avenue Oakland CA 94604 (415) 562-5628 Succursale: Paco Pumps of Canada 35 Sinclair Avenue Georgetown Ontario L7G 1J3 (416) 877-5272

Palmer Instruments 3130 Wasson Road P.O. Box 9179 Cinti. Ohio 45209 (513) 871-7800 Succursale: Palmer Thermometer 2220 Midland Ave., Unit 3 Scarborough Ontario M1P 3E6 (416) 291-9237

Parametrics 284 Racebrook Rd. Orange CT 06477 (203) 795-0811 Distributeurs: **Ainsworth Electric Ltd.** 131 Bermondsey Road Toronto Ontario M4A 1X4 (416) 751-4420 **Arrow Speed Controls, Ltd.** 54 East Third Avenue Vancouver C.-B. V5T 1C5 (604) 879-6381 **Bearing Supply Ltd.** 472 Notre Dame Avenue Winnipeg Manitoba R3B 1S9 (204) 947-0101 **Beel Controls Ltd.** 2650 boul. Pitfield St. Laurent Quebec H4S 1G9 (514) 334-6500 **Sico Drives** C6-6215 Third Street, S.E. Calgary Alberta T2H 2L2 (403) 253-8738

Paramount Glass & Millwork 105 Panet Rd. Winnipeg Man. R2J 0S1 (204) 233-4966

Parrsboro Metal Fabricators Crossroads Parrsboro N.S. B0M 1S0 (902) 254-2543

Pass & Seymour Canada 130 Martin Ross Ave. Downsview Ontario M3J 2L4 (416) 663-6277 **Agents: Darmac Agencies Limited** 7990 Graham Avenue Burnaby C.-B. V3N 1V9 (604) 524-8835 **Roche Engineering Sales Limited** 202 - 349 14th Avenue S.W. Calgary Alberta (403) 237-7396 TELEX 03-825674 **Roche Engineering Sales Limited** 11731 - 105 Avenue Edmonton Alberta T5H 0L9 (403) 452-4195 TELEX 037-3471 **Douglas A. Ligertwood Limited** 230 Avenue "Y" North Saskatoon Saskatchewan S7L 3K7 (306) 384-0422 TELEX 074-2884 **Douglas A. Ligertwood Limited** 103 Kingston Row Winnipeg Manitoba R2M 0S7 (204) 233-6873 TELEX 07-55648 **Empro Sales Company** 5250 Ferrier bureau 803 Montreal Quebec H4P 1L3 (514) 341-6420 TELEX 05-24682 **Emmersales Limited** 55 Chandler Crescent Moncton Nouveau-Brunswick E1E 3W6 (506) 855-1010 TELEX 014-2875 **K.a Wight & Associates Ltd.** Manufacturers' Representatives P.O. Box 8212 St-jean Terre-Neuve A1B 3N4

Paterson Aire Systems 3285 Mainway Dr. Burlington Ontario L7M 1A6 Toronto (416) 925-1963 Burl. (416) 335-0239 Distributeurs: **R.L. Fulton Equipment Ltd.** P.O. Box 1402 N 5654 Russell St. Halifax N.-É. B3K 5H7 (902) 453-2650 **Powrmatic du Canada Ltee.** 7400, 19e Avenue Montreal Quebec H2A 2L7 (514) 376-6293 **Powrmatic du Canada Ltee.** 365 Rue Fortin Ville De Vanier Quebec G1M 1B2 (418) 683-2706 **Heat Recovery Management Ltd.** 1745 Courtwood Crescent Ottawa Ontario K2C 3J2 (613) 225-0148 **Envirothermics** St. James P.O. Box 40 1887 Portage Ave. Winnipeg Manitoba R3J 0H3 (204) 888-2390 **N-Viro Air Supply Co. Ltd.** 847 Viewfield Road Victoria C.-B. V9A 4V2 (604) 383-6774

Patterson-Kelley P.O. Box 458 East Stroudsburg PA., U.S.A. 18301 (717) 421-7500 Représentants: **MacDonald Process Equip., Ltd.** 133 The West Mall, Unit #2 Etobicoke Ontario M9C 1C2 (416) 626-7300 **Makinson-Winchester Ltd.** 5100 St. Francois St. Laurent Montreal H4S 1J8 (514) 334-1050 **Makinson-Winchester Ltd.** 3640 Weston Rd., Unit 11 Weston Ontario M9L 1WZ (416) 749-8244

Paul Mueller P.O. Box 828 Springfield MO 65801 (417) 831-3000 **Agents: Neptune Dynamics, Ltd.** 600-890 W. Pender Vancouver C.-B. V6C 1K4 (604) 687-0887 **John Roberts & Son Inc.** 45 Pacific Court, Unit #7 London Ontario N5V 3N4 (519) 453-1980

PCB Piezotronics 3425 Walden Avenue Depew New York 14043-2495 (716) 684-0001 Représentants: **Intertechnology Ltd.** P.O. Box 219 Don Mills Ontario M3C 2S4 (416) 445-5500 **Intertechnology Ltd.** 3869 boul. des Sources bureau 207 Dollard des Ormeaux Montreal H9B 2A2 (514) 861-1325 **Intertechnology, Ltd.** Bow Valley, Square 2 Calgary Alberta T2P 2W7 (403) 265-8552 **Intertechnology, Ltd.** 180-10751 Shell Bridge Way Richmond C.-B. V6X 2W8 (604) 270-9538 **Intertechnology, Ltd.** 856 Connaught Ave. Ottawa Ontario K2B 5M6 (613) 820-5669

Peabody Engineering 1225 Matheson Blvd. Mississauga Ontario L4W 1Y9 (416) 625-1550

Peabody Gordon Piatt Box 202 Rexdale Ontario M9W 5L1 (416) 743-4401

Peel Energy Management 549 Hyacinthe Blvd. Mississauga Ontario L5A 3R4 (416) 273-4909

Peerless Electric 5585 Fullum Montreal Que. H2G 2H5 (514) 526-1671 Représentants: **Lito-Tech Industries Ltd.** 161 Bartley Drive Toronto Ont. M4A 1E6 (416) 751-5644

Peerless Pump 1200 Sycamore Street Montebello CA 90640 (213) 726-1232 Succursale: 439 Lynnover Way S.E. Calgary Alberta T2C 1L2 (403) 279-1954 Distributeurs: **Mandem** 3611-60 Avenue S.E. Calgary Alberta T2H 1L7 (403) 279-1050 **Mandem** 17704-103 Avenue Suite 104 Edmonton Alberta T5W 1J9 (403) 483-3912 **Westcan Irrigation Ltd.** 510-36th Street N. Lethbridge Alberta (403) 328-1709 **Christianson, Ltd.** Portage La Prairie Manitoba R1N 3B2 (204) 857-3451 **Mandem** 21 Murrary Park Road Winnipeg Manitoba R3G 3S2 (204) 885-4440 **Mandem** 481 Edinburgh Drive Moncton Nouveau-Brunswick E1C 8N6 (506) 854-0982 **Napier-Reid, Ltd.** 10 Alden Road, Unit 2 Markham Ontario L3R 2S1 (416) 495-1545 **Flometrico, Ltd.** 1081 Meyerside Drive Unit 11 Mississauga Ontario L5A 3A1 (416) 677-8413 **Flometrico, Ltd.** Box 2178, Station P Thunder Bay Ontario P7B 5E8 (807) 577-8812 **Mandem** 8550 Delmeade Mont Royal Montreal Quebec H4T 1L7 (514) 342-9233 **Mandem** 1250 St. John Street Regina Saskatchewan S4R 1R9 (306) 352-2631 **Mandem** 1729 Ontario Avenue Saskatoon Saskatchewan S7K 1S9 (306) 244-1505 **Chamco Engineering Sales Ltd.** 2 East First Avenue Vancouver C.-B. V5T 1A1 (604) 879-8841 **Mandem** 114 Calcite Road White Horse Yukon Y1A 4S2

Pendell Boiler 50 Bartlett Ave. Toronto M6H 3E6 (416) 536-2191

Penn Ventilator Can. C.P. 28 Farnham Quebec J2N 2R4 (514) 293-5317

Perolin-Bird Archer 110 Second St. Cobourg Ontario K9A 4M2 (416) 372-3344 Succursale: Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Quebec, Regina, Saskatoon, Toronto **Agent: Maritimes**

Peschel Instruments Inc. 1411 SE 10th St. Cape Coral FL 33904 (813) 574-3164 Représentants: **Duncan Instruments Ltd.** 122 Millwick Drive Weston Ontario M9L 1Y6 (416) 742-4448 **Commonwealth Engineering & Sales** C.P./PO Box 531 St. Laurent Montreal Que. H4L 4V7 (514) 744-1004

Petro-Sun 2915 boul. Pitfield V. St-Laurent Que. H4S 1L6 (514) 337-2264

Fournisseurs

Phelan Bros. 55 Healey Rd. Bolton Ont. L0P 1A0 (416) 857-2700

Philips Electronics 601 Milner Avenue Scarborough Ontario M1B 1M8 (416) 292-5161 Succursales: 1001 Ellesmere Road Scarborough Ontario M1P 2W7 (416) 292-8200 5930 Cote de Liesse Montreal P.Q. H4T 1E1 (514) 342-9180 130 Albert Street, Suite 1005 Ottawa Ontario K1P 5G4 (613) 237-3134 10 Morris Drive Dartmouth N.-É. B3B 1K8 (902) 463-7221 401 Weston Street East Winnipeg Manitoba R3E 3H4 (204) 774-1931 4620 Manilla Road S.E. Calgary Alberta T2G 4B7 (403) 243-2710 12872-141st Street Edmonton Alberta T5L 4S3 (403) 452-7940 3605 Grandview Highway Vancouver C.-B. V5G 2G8 (604) 435-4411

Phoenix Products Co. 4715 N. 27th St. Milwaukee Wis. 53209 (414) 445-4100 Représentants: **Images Unlimited** 7171 Torbram Rd., Unit #5 Mississauga Ont. L4T 3W4 (416) 677-8645 **Coast Dieselec, Ltd.** 1920 Main St. Vancouver C.-B. (604) 872-5201 **Pierre Lomme Engineering** 423 St. Hubert St. Jean Quebec J3B 1P9 (514) 331-5575

Photomation PO Box 460 Mountain View CA 94043 (415) 967-8992

Pittsburgh Corning 301-5075 Yonge St. Willowdale Ont. M2N 6C6 (416) 222-8084 Succursales: Montreal (514) 866-9100 Vancouver/Calgary (604) 936-0030/(403) 236-1873

Plantguard Systems PO Box 1504 St. Catharines Ontario L2R 7J9 (416) 685-9444

Plasti-Fab Ltd. 625, 28 St. N.E. Calgary Alberta T2A 4L6 (403) 273-0996 Succursales: 679 Alford Ave. New Westminster C.-B. V3B 5B5 (604) 526-7861 16625-114 Ave. Edmonton Alberta T5M 3P9 (403) 453-3718 837-57 St. East Saskatoon Sask. S7K 5Z2 (306) 244-3545 976 Dugald Ave. Unit 3 Winnipeg Manitoba R2J 0G9 (204) 237-7711

Plibrico (Canada) P.O. Box 910 Burlington Ontario L7R 3Y7 (416) 639-8660 Succursales: 1465 Graham Bell Boucherville Quebec J4B 6A1 (514) 641-1730 865 King Edward St. Winnipeg Manitoba R3H 0P8 (204) 772-2406 11604-163 St. Edmonton Alberta T5M 3T3 (403) 451-0681 Unit No: 10 6204-29th St. S.E. Calgary Alberta T2C 1W3 (403) 236-0191 1170 Glen Dr. Vancouver C.-B. V6A 3M6 (604) 253-5528 100 Albert St. Ext., Moncton Nouveau-Brunswick E1C 8M9 (506) 855-7877

PMC/Beta Corporation 4 Tech Circle Natick Massachusetts 01760 (617) 237-6920 Représentants: **Automation Industries, Ltd.** 6860 Rexwood Rd. Mississauga Ontario L4V 1L8 (416) 678-9590

Pollard & Son, N. P.O. Box 507 Burlington Ontario L7R 3Y3 (416) 634-2365 Succursale: 4380-76th Ave. S.E. Calgary Alberta T2C 2J2 (403) 236-0195

Porritts & Spencer Filtration 240 Lottridge St. Hamilton Ont. L8L 6V9 (416) 547-5730 TELEX 061-8828 TORLINE 842-1037 Succursales: 2520 Palliser Dr. S.W. Calgary AL T2V 4S9 (403) 281-5295 TELEX 03-82568 7493 Trans Canada St. Laurent P.Q. H4T 1T3 (514) 331-4627 TELEX 05-826794

Potter & Brunfield 52 Royal Rd. Guelph Ont. W1H 7H1 (519) 822-1576 **Power Vac Services** 4544 Sheppard Ave. East Scarborough Ont. M1S 1V2 (416) 292-7718

Power/Mate Corp. 514 South River Street Hackensack NJ 07601 (201) 440-3100 Représentants: **Radionics Limited** 1240 Ellesmere Road Scarborough Ontario M1P 2X4 (416) 292-1575

Powsave Systems 615 Sheppard Ave. E. Willowdale Ont. M2K 1B5 (416) 221-9778

PPG Industries Canada 50 St. Clair Ave. West Toronto Ontario M4V 1M9 (416) 923-5441 Succursales: 255 Boul. Decarie St-Laurent Quebec H4N 2L8 (514) 748-8718 4416-72nd Ave. S.E. Calgary Alta. T2C 2C1 (403) 279-8831

Precision Multiple Conrols 3289 Lenworth Drive, Unit E Mississauga Ont. L4X 2H1 (416) 625-6225

Prelco Electronics Ltd. 2767 Thamesgate Dr. Mississauga Ont. L4T 1G5 (416) 678-0401

Preso Industries 3035 Sartelon St. Laurent Que. H4R 1E6 (514) 334-0903

Presto Tek 7321 N. Figueroa St. L.A. Calif. 90041 (213) 257-7585

Pro Controls Box 952 Niagara Falls Ontario L2E 6V8 (416) 295-3222

Prochem R.R. No 2, 35-190 Hwy. 7 W. Brampton Ontario L6V 1A1 (416) 459-4319

Prodel 370 Ave. Des Laurentides Beauport P.Q. G1C 4N3 (418) 663-3112

Proenco Systems #14, 190 Hwy #7 West Brampton Ontario L7A 1A2 (416) 451-3232

Progressive Equipment 413 E. Ninth St. Erie PA 16503 (814) 452-4363

Prolight 87 Penn Drive Weston Ontario M9L 2A6 (416) 745-7064

Promac Controls Inc. 1375 Morningside Avenue Scarborough Ontario M1B 3C5 (416) 284-8440

PSG Industries 1225 Tunnel Rd. Perkasie PA 18944 (215) 257-3621 **Agent: Dyna Tech Systems** 6390 Aubrey St. N. Burnaby C.-B. V5C 5P2 (604) 294-1191

Pumps & Softeners 680 Waterloo Street London Ontario N6A 4N8 (519) 672-0330

Pyle-National of Canada 2560 South Sheridan Way Mississauga Ont. L5J 2M9 (416) 822-3710

R

RAB Dedesco 106 Schneider Rd Kanata Ont. K2K 1Y2 (613) 592-3026

Rada Mechanical Products PO Box 148 Markham Ontario L3P 3J5 (416) 297-2173 TELEX 06-986888

Radiant Tube Systems 71 Brydon Drive Rexdale Ont. M9W 4N3 (416) 746-5511

Ral Products 1146 Westport Cr. Unit 6 Mississauga Ontario L5T 1G1 (416) 671-3787 TELEX 06-968946

Ramsey Controls 333 Route 17 Mahwah NJ 07430 (201) 529-4400 Distributeurs: **Eltron Enterprises, Ltd.** 7583 Vantage Place Delta C.-B. V4G 1A5 (604) 946-1271 **L.S. Tarshis & Sons, Ltd.** 815 McCaffrey St. Laurent Montreal H4T 1N3 (514) 731-3411 **L.S. Tarshis & Sons, Ltd.** 50 Galaxy Blvd. Unit 5 Rexdale Ontario M9W 4Y5 (416) 675-3100 **Saftronics Systems, Ltd.** 149 Denison St. Markham ON L3R 1B5 (416) 492-8194

Rantach Electronics 230 Canarctic Dr. Downsview Ont. M3J 2P4 (416) 661-9319

Raskin, F.G. Montreal PQ H1P 1J8 (514) 323-5920

Ray Burner 1301 San José Ave. San Francisco CA 94112 (415) 333-5800

Raypak Thermonics (Canada) 120-124 Skyway Avenue Rexdale Ontario M9W 4Y9 (416) 675-7262

RCC Electronics 243 College St. Toronto Ontario M5T 2Y1 (416) 598-4004

RCR 2295 Metropole Longueuil P.Q. J4G 1E5 (514) 670-8100

Reliance Electric 296 Walker Drive Bramalea Ont. L6T 4B3 (416) 792-1739

Reliance Electric Ltd. Dodge Div. 5220 Greenbank Rd. Mississauga Ontario (416) 625-8112 Distributeurs: **Ainsworth Electric Ltd.** 131 Bermondsey Rd. Toronto Ontario M4A 1X4 (416) 751-4420

Repla 482 South Service Rd. E. Oakville Ont. L6J 2X6 (416) 844-1271

Republic Powdered Metals 12 Finley Road Bramalea Ontario L6T 1A9 (416) 457-6209

Research Appliance Co. P.O. Box 265 Cambridge MD 21613 (301) 228-9505 Représentants: **Hoskin Scientific Ltd.** 1156 Speers Road Oakville Ontario L6L 2X4 (416) 842-0237 **Hoskin Scientific (Western)** 239 East Sixth Avenue Vancouver C.-B. V5T 1J7 (604) 872-7894 **Hoskin Scientific (Eastern)** Suite 1205-Maritime Center 1505 Barrington St. Halifax N.-É. B3J 3K5 (506) 425-8683 **Les Instruments - Hoskin** 5683 Pare Montreal Quebec H4P 1S1 (514) 738-9421

Resource Interface Suite 200 2 Sheppard Avenue East Willowdale Ontario M2N 5Y7 (416) 226-6568

Resources Conservation Co. P.O. Box 3766 Seattle Washington 98124 (206) 828-2400

Reuter-Stokes Canada 465 Dobbie Dr. Cambridge Ontario H1R 5X9 (519) 623-4880

Rexanne Products P.O. Box 39702 or 2439 Riverside Dr. Los Angeles CA 90039 (213) 663-3261

Reynolds Extrusion 500 Edward Ave. Richmond Hill Ontario L4C 4Y9 (416) 884-9181

RFL International Powerville Road Boonton New Jersey 07005 (201) 334-3100 Représentants: **Duncan Instruments Ltd.** 122 Millwick Drive, Unit 3 Weston Ontario M9L 1Y6 (416) 742-4448 **Jerome & Francis Co.** 1015 Prospect Avenue No. Vancouver C.-B. V7R 2M5 (604) 986-1286

Rheem Canada 128 Barton St. W. Box 846 Hamilton Ontario L8N 3P3 (416) 527-9194

Richard W. Watt & Associates P.O. Box 660 Oconomowoc WI 53066 (414) 646-4296

Riddaire Corporation 1210 Sheppard Ave. East Willowdale Ont. (416) 497-1308

Riley-Beaird P.O. Box 31115 Shreveport LA 71130-1115 (318) 865-6351 Représentants: **Mechron Engineering Products Ltd.** 207 Place Frontenac Pointe Claire, Montreal Quebec H9R 4Z7 (514) 695-1485 **Petro Equipment Sales, Ltd.** P.O. Box 5843 Sta. "A" Calgary Alberta T2H 1Y3 (403) 243-4773

Riverwood Enterprises & Mfg. 985 Westport Crescent Mississauga Ontario L5T 1E8 (416) 687-6720

Robert Bell Ind. Ltd. P.O. Box 70 Seaforth Ontario N0K 1W0 (519) 527-0600 TELEX 069-55305

Robert H. Wager Passaic Ave. Chatham New Jersey 07924 (201) 635-9200 Représentants: **Nortech Control Equipment Inc.** 135-4 The West Mall Etobicoke Ontario M9C 1C2 (416) 622-7820 **B&D Engineering Sales** 2402 Shell Road Richmond C.-B. V6X 2P1 (604) 273-9481

Robert Hunt Corp. 1040 Wilton Grove Road London Ontario N6A 4C2 (519) 686-3100 Succursales: R.R. #4, Hwy. #135 London Ontario (519) 681-2660 250 Bowes Road Concord Ontario (416) 669-1104 195 Colonnade Road Nepean Ontario (613) 226-1881 352 Saulteaux Cres. Winnipeg Manitoba (204) 885-9220 4116-72nd Avenue S.E. Calgary Alberta (403) 279-2473 0944-18th Street Edmonton Alberta (403) 464-5331 58 Wright Avenue Dartmouth N.-E. (902) 469-6550 2060 boul. Thimens St. Laurent Quebec (514) 332-2585 2083 Branly Ste. Foy Quebec (418) 683-1762 9 Riverview Drive Mount Pearl T.-N. (709) 368-8354 877 Wilson Avenue Kitchener Ontario (519) 893-7922 10280 Tecumseh Road East Windsor Ontario (519) 735-2100 2335 Maley Drive Sudbury Ontario (705) 566-0222 639 Park Street Regina Saskatchewan (306) 949-1666 501-45th Street Saskatoon Saskatchewan (306) 244-2800 #104-3850 Jacombs Road Richmond C.-B. (604) 270-8777

Robert Mitchell 350 boul. Decarie St. Laurent Que. H4L 4W5 (514) 747-2471

Robert Soper P.O. Box 277 Hamilton Ontario L8N 3E8 (416) 528-7936 Succursales: Soper Tent & Awning Ltd. Box 1760 Mississauga Ontario L4Y 3W6 (416) 274-8501 213 D'Avingnon Dollard Des Ormeaux Quebec H9B 1Y4 (514) 683-5498 P.O. Box 29 Morinville Alberta T0G 1P0 (403) 939-4182

Robertshaw Controls Canada Mississauga Ontario L4Y 3Z2 (416) 233-5831

Rochester Instrument Systems 915 Kipling Ave. Toronto Ontario M8Z 5H4 (416) 233-6218 Représentants: **Quontime Inc.** C.P. 201 Succ. Snowdon Montreal Que. H3X 3T4 (514) 937-3914 TELEX 055-66268 **Quontime Inc.** Box 952 Armdale P.O. Halifax N.-E. B3L 4K9 (902) 477-9750 **Controls Equipment Ltd.** 317 Adelaide St. S. London Ont. N5Z 3L3 (519) 681-9390 TELEX 064-7217 **Controls Equipment Ltd.** 2410 Tedlo Street Mississauga Ont. L5A 3V3 (416) 275-1571 TELEX 06-961398 **D.A. Mc Cuaig Agency Ltd.** 471 Warsaw Ave. P.O. Box 188 Winnipeg Man. R3L 0R2 (204) 284-3834 TELEX 07-58752 **Simark Controls Ltd.** 7725-46th St. S.E. P.O. Box 5514, Stn. "A" Calgary Alberta T2H 1X9 (403) 236-0580 TELEX 07-587521 **Simark Controls Ltd.** 4748-99th Street Edmonton Alberta T6E 5H5 (403) 436-8850 TELEX 037-2220 **Black & Baird Ltd.** 1362 Venables St. Vancouver C.-B. V5L 2G4 (604) 251-2232 TELEX 04-51216

Rock Master 1022 Santerre Drive Grand Prairie Texas 75050 (214) 647-2885 Représentants: **Eastside Industrial Products, Ltd.** Bay #2, 2280-39th Ave. N.E. Calgary Alberta T2E 6P7 (403) 276-7050 **Exploration Rock Bit Sales, Ltd.** 6107-103rd Street Edmonton Alberta T6H 2H3 (403) 436-7122 **Futros Equipment Canada, Inc.** 135 Paramont Road Winnipeg Manitoba R2X 2W6 (204) 632-9124 **Eastern Carbide Tools, Ltd.** Pt. Edward Industrial Park P.O. Box 1411 Sydney N.-E. B1P 5Z0 (902) 539-7090

Rockwell International of Canada 41 Massey Road P.O. Box 606 Guelph Ontario N1H 6L3 (519) 821-4880 Succursales: 4411 Manitoba Road South East Calgary Alberta T2G 4B9 (403) 287-2670 Bureau 211 970 Montée de Liesse St. Laurent Québec H4T 1W7 (514) 337-9110 45 West 7th Avenue Vancouver C.-B. V5Y 1L4 (604) 874-8211—gaz (604) 874-8224—eau

Ronan Engineering 32 Bermondsey Rd. Ontario M4B 1Z5 (416) 752-0310

Rosemount Analytical 2400 Barranca Rd. Irvine CA 92714 (714) 546-8700 Succursale: 426 Ave. Dollard #105 LaSalle Quebec H8N 1S6 (416) 678-1000

Roth Pump P.O. Box 910 Rock Island Illinois 61201 (309) 787-1791 Représentants: **Graham Company** P.O. Box 9 St-jean N.-B. E2L 3X1 (506) 652-2100 **TADCO Engineering Ltd.** P.O. Box 253 Etobicoke Ontario M9C 4V3 (416) 276-8018 **Thermal Engineering Sales, Ltd.** 4240-91A Street Edmonton Alberta T6E 5V2 (403) 463-0933

Roto Aire Dist. Can. 7710 Kingsway Burnaby C.-B. V3E N3E 526-9761

Russelectric South Shore Park Hingham MA 02043 (617) 749-6000 Distributeurs **Robert Begg Ltd.** P.O. Box 780 Thornhill Ontario L3T 4A5 (416) 495-0581

S

Safety Supply Canada 214 King St. E. Toronto Ontario M5A 1J8 (416) 364-3234

Saftronics Box 1749 53 Victoria Rd. Guelph Ontario N1H 6Z9 (519) 836-6301 Succursales: 149 Denison Markham Ont. (416) 492-8194 16 Packham Road Stratford Ont. (519) 271-6980

Sarama Lighting 10700 boul. Parkway D'anjou Quebec H1J 1R6 (514) 683-8548 Succursales: 530 Champagne Drive Downsview Ontario M3J 2T9 (416) 636-9881 301-873 Beatty Vancouver C.-B. V6B 2M6 (604) 687-4541 3519 Doveridge Drive S.E. Calgary Alberta T2B 2B2 (403) 272-1949 14 Stanley Drive St. Albert Alberta T8N 0J7 (403) 458-4840 636 Sherene Terrace London Ontario N6H 3K1 (519) 471-3590 123 Pinehouse Dr. Suite C Saskatoon Sask. S7K 4J7 (306) 242-4641 404-115 Bannatyne Ave. E. Winnipeg Manitoba R3B 0R3 (204) 943-0510 P.O. Box 4483 St-jean T.-N. A1C 6C8 (704) 753-6674

Scarborough & Grant 30 LePage Court Downsview Ontario M3J 1Z9 (416) 633-4130

Schlegel Canada P.O. Box 218 514 South Service Rd. Oakville Ont. L6J 5A2 (416) 845-6657 Sans-frais Ont. & Que. 1-800-268-5039

Schramm 800 E. Virginia Ave. West Chester PA 19380 (215) 696-2500 Représentants: **Marig Inc.** 230, 3300 Boul. Cavendish Montreal P.Q. H4B 2M8 (514) 487-1055 **Cubex C.-B. Ltd.** #1-12180 Horseshoe Way Richmond C.-B. V7A 4S5 (602) 271-2551 **Cubex Ltd.** 991 Jarvis Avenue Winnipeg Manitoba R2X 0A1 (204) 589-4354 **Ray-Gordon Equipment Ltd.** 21 Milvan Drive Weston Ontario M8L 1Y8 (416) 742-3190 **T.P.S. Industries, Inc.** 62 Goshen Street Tillsonburg Ontario N4G 4J1 (519) 842-7351 **Wainbee Limited** 215 boul. Brunswick Pointe Claire Quebec H9R 4R7 (514) 697-8810

Schwark 2245 Midland Ave. Scarborough Ontario M1P 4P9 (416) 291-1669

Scientific-Atlanta P.O. Box 105038 Atlanta GA 30348 (404) 449-2301 Succursale: 1640 Bonhill Rd., Unit 6 Mississauga Ontario (416) 677-6555

Scyfrom Inc. 128 Sterling Rd. Toronto Ontario M6R 2B7 (416) 535-1151 Distributeurs: **Argo Engineering** 7915-116th Street Delta C.-B. V4C 5T7 (604) 943-9815 TELEX: 04-355709 **Atlantic Specialties Ltd.** P.O. Box 487 Mount Pearl St-jean T.-N. A1N 2W4 (709) 368-8539 TELEX: 016-3196 **Cecco Supply Ltd.** 20 Towerline Place London Ontario N6E 2T1 (519) 681-1200 **Cecco Supply Ltd.** P.O. Box 607 Sarnia Ontario N7T 7J4 (519) 336-4990 **Dock Specialist & Equipment Company Limited** 1121 Bellamy Road North Unit #1 Scarborough Ontario M1H 3B8 (416) 438-6676 **Farwil Corporation** 10528-123rd Street Edmonton Alberta T5N 1P1 (403) 482-7181 TELEX: 037-2009 **Farwil Corporation** 3518D-62 Avenue S.E. Calgary Alberta T2G 1Z8 (403) 279-2850 TELEX: 038-27534 **Glenridge Sales & Equipment Co. Ltd.** 120 Ottawa St. North, Suite 206 Kitchener Ontario N2H 3K4 (519) 576-5150 **Intercity Industrial Supply** P.O. Box 3140 669 Squier Street Thunder Bay Ontario P7B 5O6 (807) 345-2324 TELEX: 073-4618 **Kernic Equipment Sales Ltd.** P.O. Box 53 Burlington Ontario L7L 3X8 (416) 637-3232 TELEX: 061-8779 **King Materials Handling Ltd.** P.O. Box 2452 Walkerville Postal Station Windsor Ontario N8Y 4S2 (519) 255-9224 TELEX: 064-77721 **Ottawa Awning & Canvas Co.** 883 Boyd Ave. Ottawa Ontario K2A 2E2 (613) 725-3097 **Quality Storage Equipment** 70 Mark Street Sault Ste. Marie Ontario P6A 3M2 (705) 254-6235 TELEX: 067-77245 **Quality Storage Equipment** P.O. Box 2071 Sudbury Ontario P3A 4R8 (705) 675-2350 **J.H. Ryder Machinery Co. (Eastern) Limited** 3800 Trans-Canada Pointe-Claire Quebec H9R 1B1 (514) 697-3471 TELEX: 058-21652 **Wearing Williams Ltd.** 240 Saulteaux Crescent Winnipeg Manitoba R3J 3T2 (204) 885-4810 TELEX: 07-57741

Sentrol Systems 4401 Steeles Avenue West Downsview Ontario M3N 2S4 (416) 661-7000 Succursale: #1, 6325-12th Street, S.E. Calgary Alberta T2H 2K1

Sentry Equipment Box 127 Oconomowoc WI 53066 (414) 567-7256 Représentants: **Kienzold Co. Ltd.** 711 Ave. La Joie Dorval Quebec H9P 1G7 (514) 636-6030

Serflico 1234 Depot St. Glenview IL 60025 (312) 998-9300

Shaw Industries Ltd. 25 Bethridge

Fournisseurs

Road Rexdale Ontario M9W 1M7 (416) 743-7111 TELEX 06-989435 Succursales: 500-4th Avenue S.W. Calgary Alberta T2P 2V6 (403) 263-2255 TELEX 038-21734 Hwy. 53 and Nebo Road Hamilton Ontario L0R 1P0 (416) 385-3183 TELEX 06-18865 Hwy. 140 and Ridge Road Welland Ontario L3B 5R3 (416) 735-0066 TELEX 06-15439 Pasqua Street North Regina Saskatchewan S4P 3C2 (306) 543-2552 TELEX 071-2249 10275-21st Street Edmonton Alberta T6P 1P3 (403) 467-5501 TELEX 037-2500 9229 Barlow Trail S.E. Calgary Alberta T2C 0E0 (403) 279-4415 TELEX 038-21888 12905-80th Avenue North Surrey C.-B. V3W 3B1 (604) 594-0401 TELEX 043-51121 Tradewinds Barge Coal Harbour Vancouver C.-B. V6B 4B2 (604) 689-5166 TELEX 04-55705 2340 Chemin Lucerne Ville Mont Royal Quebec H3R 2J8 (514) 735-4501 TELEX 058-25898 4476-97th Street Edmonton Alberta T6E 5R9 (403) 435-3485 TELEX 037-2536 Airport Road Huntsville Ontario P0A 1K0 (705) 789-2363 TELEX 068-75556

Shortridge Instruments 14609 N. Scottsdale Rd. Scottsdale AZ 85260 (602) 991-6744

Siemens Electric 7300 Trans-Canada C.P. 7300 Pointe Claire Que. H9R 4R6 (514) 695-7300 Succursales: 6143-4th Street S.E. Calgary Alta. T2H 2H9 (403) 252-2278 TELEX 038-25624 9829-45th Avenue Edmonton Alta. T6E 5C8 (403) 436-6640 TELEX 037-2300 P.O. Box 9048, Station "A" Halifax N.-É. B3K 5M7 (902) 443-5071 TELEX 019-22739 150 Katimavik Drive Kanata Ont. K2L 2N2 (613) 592-2477 TELEX 053-3658 1990 boul. Charest ouest Ste-Foy Qué. G1N 4K8 (418) 681-7393 501 Oakdale Road Downsview Ont. M3N 1W7 (416) 743-8844 TELEX 06-527150 690 W.-7th Ave. Vancouver C.-B. V5Z 1B5 (604) 879-0671 TELEX 04-55324

Sihi Pumps 225 Speedvale Ave. W. Guelph Ont. N1H 6L8 (519) 824-4600

Silonex 2150 Ward Montreal Que. H4M 1T7 (514) 744-5507

Simplex Int'l Time Eq. 6300 Viscount Rd. Mississauga Ont. L4Y 1H3 (416) 677-2000 Succursales: 8570 Fraser Street Vancouver C.-B. V5X 3Y3 (604) 324-4466 3-1715-27 Avenue North East Calgary Alberta T2E 7E1 (403) 277-2207 4141-98th Street Edmonton Alberta T6E 5N5 (403) 463-4940 2909 Saskatchewan Drive Regina Saskatchewan S4T 1H4 (306) 525-8808 West Row Industrial Mall 1467 St. James Street Winnipeg Manitoba R3H 0W9 (204) 774-1945 1105 Barmac Drive Weston Ontario M9L 1X4 (416) 742-0294 515 Arvin Ave. Stoney Creek Ont. L8E 2N1 (416) 560-0995 1665 Russell Road Bldg. #2, Unit #12 Ottawa Ontario K1G 0N1 (613) 521-2851 192 Joseph Zatzman Drive, Suite B Dartmouth N.-É. B3B 1N4 (902) 466-7415

Singer Company of Canada 3037 Dehry Road West Milton Ontario L9T 2X6 (416) 878-2361 Succursales: 3860 Notre Dame bureau 300 Chomedey, Laval Quebec H7V 1S1 (514) 687-1661 Mayland Office Park #3 Suite 103, 31 Manning Cresc. N.E. Calgary Alberta T2E 7M9 (403) 235-5141 9919-65th Avenue Edmonton Alberta T6E 0L1 (403) 434-8705

Sirco Products 8815 Selkirk Street Vancouver C.-B. V6P 4J7 (604) 261-9321 Représentants: **Can-Am Instruments Limited** 1938 Mattawa Avenue, Mississauga Ontario L4X 1K1 **West Isle Industries Ltd.** 5795 Donahue St. Laurent, Montreal Quebec H4S 1C4 **Quontime Inc.** CP 201, Succ Snowdon Montreal Quebec H3X 3T4 **PMI Ltd.** 8707-50th Avenue Edmonton Alberta T6E 5H4

Skan-A-Matic P.O. Box S Elbridge N.Y. 13060 (315) 689-3961 Distributeurs: **CSI Controls Ltd.** 50 Bullock Dr., Unit 5 Markham Ontario L3P 3P2 (416) 294-5274

Slant/Fin 100 Forest Drive at East Hills Greenvale New York 11548 (516) 484-2600 Succursale: 6450 Northam Drive Mississauga Ont. L4V 1H9 (416) 677-8400

Soget 791-793 Lajoie Dorval Quebec H9P 1E7 (514) 636-8190

Solar Centre #205-8475 Ontario St. Vancouver C.-B. V5X 3E8 (604) 324-1442

Solar Turbines Canada Suite 420, 1 pl du Commerce Ile-des-Soeurs Verdun Que. H3E 1A2 (514) 769-2753 Succursales: Suite 3000, Bow Valley Square 2 205-5th Ave S.W. Calgary Alberta T2P 0V7 (403) 261-2640 8612-24th Street P.O. Box 5630, Stn. L Edmonton Alberta T6C 4G1

Solarsystems Industries #2-11771 Horseshoe Way Richmond C.-B. V7A 4S5 (604) 271-2621

Solartech 39 Cranfield Road Toronto Ontario M4B 3H6 (416) 752-4990

Solid Waste Management 155 Navy St., Ste 1207 Oakville Ontario L6J 2Z7 (416) 844-3631

Solidyne 205 W. 35th St. National City CA 92050 (714) 427-9640

Sommers Motor General or Sales Box 548, 35 Elizabeth St. Tavistock Ont. N0B 2R0 (519) 655-2396

Specialty Chemicals 270 Industrial Parkway Aurora Ontario Succursales: 207 Place Frontenac Pointe Claire Quebec H9R 4Z7 (514) 697-6767 80 Colonnade Rd. Ottawa Ontario K2E 7L2 (613) 225-0277

Sprague Electric of Canada 49 Bertal Road Toronto Ontario M6M 4M7 (416) 766-6123 Succursale: 85 Albert Street Ottawa Ontario K1P 6A4 (613) 238-2542

Spraycool 50 Mississauga Vly. Bl. #817 Mississauga Ontario L5A 3S2 279-3072

Square D Canada 6303 Airport Road Mississauga Ontario L4V 1S2 (416) 678-7000 Succursales: General Delivery Torbay Nfld. A0A 3Z0 7071 Bayers Rd. Ste. #13 Halifax N.-É. B3L 2C2 39 Rue Industrial St. Dieppe N.B. E1A 2B9 59 Est Des Bouleaux Apt. 105 Quebec P.Q. G1L 1T6 825 Rue Bancroft Pte. Claire P.Q. H9R 4L6 1481 Heron Rd. Ottawa Ont. K1V 6A6 78 Catharine St. N. Hamilton Ont. L8R 1J2 554 Parkside Dr. Waterloo Ont. N2L 5V4 24 Black Friar's Rd. St. Catharines Ont. L2N 2N1 280 Maitland St. London Ont. N6B 2Y6 504 Victoria Ave. Windsor Ont. N9A 4M8 #3-2065 Logan Ave. Winnipeg Man. R2R 0J1 259 A.E. Adams Crs. Saskatoon Sask. S7K 5M8 #205-1035-64th Ave. S.E. Calgary Alta. T2H 2J7 12825-144 St. Edmonton Alta. T5L 4N7 #113-7400 McPherson Ave. Burnaby C.-B. V5J 5B7

Standard Equipment Co. 9240 N. 107th Street Milwaukee Wisconsin 53224 (414) 355-9730 Représentants: **Infrared Inspection Service** 194 Yonge Street Newmarket Ontario L3Y 4V8 (416) 898-5822

Star Systems 101 Kershaw Street Timmonsville South Carolina 29161 (803) 346-3101 TELEX 810-680-2531 Représentants: **Dur-Pro Ltd.** 1600-50 Avenue Jame Lachine Montreal H8T 2V5 (514) 631-4057 TELEX 05-821752

STC Controls Gen. Del. 94 Cochrane Cres. Cochrane Alta. T0L 0W0 (403) 932-4325

Sterling Power System 799 Rennie St. P.O. Box 3313, Stn. C Hamilton Ont. L8H 7L4 (416) 547-2345

Sternson P.O. Box 130 Brantford Ontario N3T 5N1 (519) 759-6600 Succursales: 7755 Venture Street Burnaby C.-B. V5A 1T9 (604) 420-5731 1402-8th Street Nisku Alberta T0C 2G0 (403) 955-2866 66 Hymus Road Scarborough Ontario M1L 2C7 (416) 752-8240 403 boul. LeBeau St. Laurent Quebec H4N 1S2 (514) 332-9922

Stickle Steam Spec. Co. 2215 Valley Ave. Indpls. IN 46218 (317) 636-6563

Stran Steel Building Systems 105 Industrial Road Richmond Hill Ontario L4C 2Y4 (416) 884-9117 Succursales: **Westeel-Rosco** 8750 Ash St. Vancouver C.-B. V6P 6C7 (604) 321-4311 **Westeel-Rosco** 6210 75th Street P.O. Box 5740, Stn. 'L' Edmonton Alberta T6C 4G2 (403) 468-4909 **Westeel Rosco** C.P. 1123 Terminus Quebec P.Q. G1K 7C3 (418) 522-6492 **Stran Steel Building Systems** R.R. #9 Fredericton N.B. E3B 4X9 (506) 455-1634 **Stran Steel Building Systems** 50 Langevin Cres. West Hill Ont. M1C 2B6 (416) 284-0991

Sugar Hut Hill Holdings P.O. Box 105 Manotick Ontario K0A 2N0 (613) 692-2166

Sun Ray Solar Systems 2429 Seminole St. Windsor Ont. N8Y 1X2 (519) 253-1182

Sunsau 640 S. Union St. Lawrence Mass. 01843 (617) 687-0044

Suntrap Systems 500 York Rd. Guelph Ont. N1E 3J4 (519) 822-2762

Superseal 5575 Boul. Laurier C.P. 396 St-Hyacinte Que. J2S 7B9 (514) 773-7411

Surgeonics 155 Kisco Ave. Mt. Kisco N.Y. 10549 (914) 241-3203 Représentants: **E.S. Gallagher Sales Limited** 44 Eugene St. Toronto Ontario M6B 3Z4 (916) 789-5385

Syncro Flo 721 Miami Cr. Atlanta GA 30324 (404) 266-0467 Représentants: **Jenkinson and Company, Inc.** 23 Chauncey Avenue Toronto Ontario (416) 233-6245 **J. R. Stephenson LTD** P.O. Box 3336 Station D Edmonton Alberta T5L 4J2 (403) 454-4596 **J. R. Stephenson LTD** 555 Madison Street Winnipeg Manitoba R3H 0L6 (204) 775-8561 **J. R. Stephenson LTD** P.O. Box 1580 Regina Saskatchewan S4P 3C4 (306) 569-0654 **J. R. Stephenson LTD** 407A-44th Street East Saskatoon Saskatchewan S7K 0V9 (306) 242-1231 **J. R. Stephenson LTD** 3624 Manchester Road Calgary Alberta T2G 3Z5 (403) 287-1930

Synerco Systems For Energy Conservation 639 St-Jacques Granby Quebec J2G 3P6 (514) 372-7943

T

Taco (Canada) 3090 Lenworth Dr. Mississauga Ontario L4X 2G1 (416) 625-2160

Tanner Systems of Canada PO Box 87, East Hwy. 23 Sauk Rapids MN

56379 (612) 252-8877 TELEX 29-0716 Représentants: **TG Mechanical Products, Ltd.** 3225 Mainway Drive Burlington Ontario L7M 1A6 (416) 335-1440 **Production Supply Co., Ltd.** 19829-99A Ave. Langley C.-B. V3A 4P8 (604) 888-1552 **Production Supply Co., Ltd.** 8831-50th Ave. Edmonton Alberta T6B 1E7 (403) 468-3431 **Production Supply Co., Ltd.** 423 Manitou Rd. S.E. Calgary Alberta T2G 4C2 (403) 287-1275 **Production Supply Co., Ltd.** 1259 Clarence Ave. Winnipeg Manitoba R3T 1T4 (204) 453-4849 **Dominion Bridge Co., Ltd.** P.O. Box 578, 845 Logan Ave. Winnipeg Manitoba R3C 2K2 (204) 947-0111 **R.A. Warren Equipment, Ltd.** R.R. #2, Hwy. 11 No. North Bay Ontario P1B 8G3 (705) 474-2331 **R. A. Warren Equipment, Ltd.** 66B Lorne St., P.O. Box 1149 Sudbury Ontario P3E 4S6 (705) 675-5326 **Rab Engineering, Ltd.** 4626 Burgoyne St. Mississauga Ontario L4W 1G2 (416) 625-7811 **National Bearing, Ltd.** 716 Ave. Renaud Dorval Quebec H9P 1H5 (514) 631-9441 **National Bearing, Ltd.** 529 Quebec Sept Isles Quebec G4R 1K1 (418) 962-9718 **National Bearing, Ltd.** 118 Humphrey, Bruno Plaza Labrador City Terre-Neuve A2V 2J3 (709) 494-9661-2-3 **Coastal Equipment Agencies, Ltd.** 188 Joseph Datzman Drive Dartmouth N.-É. B3B 1N4 (902) 469-0030

Tapecoat of Canada 25 Haas Rd. Rexdale Ontario M9W 3A1 (416) 743-8705

Tasso 5175 de Maisonneuve ouest Montreal Quebec H4A 1Z3 (514) 488-4902

Tecnecon Electronics Inc. 1760 Midland Scarborough Ontario M1P 3C2 (416) 759-3622

Tekelek 67 Lewis Rd. Guelph Ontario N1H 1E3 (519) 821-9840

Tel-Tru Manufacturing 408 St. Paul St. Rochester NY 14605 (716) 232-1440 Représentants: **Brian Engineering Inc.** 2445 Duncan Montreal Que. H4P 2A2 (514) 735-1671

Teledyne Analytical Instr. 16830 Chestnut Street City of Industry CA 91749 (213) 961-9221 Représentants: **Westech Industrial** 169 Seneca Rd. Sherwood Park Alberta (403) 252-8803 **P.F. Vermeer Ltd.** 85 Ferrier St., Unit 5 Markham Ontario L3R 2Y9 (416) 495-1830

Teledyne Inet 2750 W. Lomita Blvd. Torkance CA 90509 (213) 325-5040

Teledyne Laars Canada 480 South Servich Rd. W. Oakville L6K 2H4 (416) 844-8233

Telemecanique Canada 580 Ave. Lepine Dorval P.Q. H9P 1G2 (514) 636-9560 Succursale: 3791 Victoria Park Ave. Units 6, 7 Scarborough Ontario M1W 3K6 (416) 492-7343

Temprite Ind. 6470 Viscount Rd. Mississauga Ont. L4V 1H3 (416) 678-7780 Succursales: 1160 Blair Road, Suite 118A Burlington Ontario L7M 1K9 (416) 335-0540 TELEX 06-18966 317 Adelaide Street South London Ontario N5Z 3L3 (519) 685-0400 TELEX 064-7222 347 Sherbrooke Street, Suite 301 North Bay Ontario P1B 2C1 (705) 476-5071 TELEX 067-76201 610A-70th Avenue South East Calgary Alberta T2H 2J6 (403) 253-1201 TELEX 03-826596 510B-47th Street Leduc Alberta T9E 2Y9 (403) 986-4400 TELEX 037-41441

Tervcon 5584 Tomken Rd. Mississauga Ont. L4W 1P5 (416) 625-5750

Texas Instruments 280 Centre St. E. Richmond Hill Ont. L4C 3G2 (416) 884-9181 Distributeurs: **Ontor Ltd.** 12 Leswyn Rd. Toronto Ont. M6A 1K3 (416) 781-5286 **Energesis Control Systems** 191 Wellington St. E. Markham Ont. L3P 3B4 (416) 294-5360

Therma-Ray Mfg. PO Box 516, 83 Spencer Plains Rd. Old Saybrook CT 06475 (203) 399-7933

Thermal Energy Devices PO Box 1427, Station B Burlington L7P 4C5 (416) 689-8931

Thermax Canada 39 Main Street Vankleek Hill Ontario K0B 1R0 (613) 678-3322

Thermidaire Corp. (1974) 31 Ralside Rd. Don Mills Ontario M3A 1B2 (416) 445-7301

Thermo Electric (Canada) 12 Rutherford Road South Brampton Ontario L6W 3J2 (416) 451-0813 Succursales: 8425 Argyll Road Edmonton Alberta T6C 4B2 (403) 468-1661 3005 De Baene St. Laurent Montreal P.Q. H4S 1K8 (514) 331-2032 Représentants: **Electro Systems Group** 532 Berry Street Winnipeg Manitoba R3H 0R9 **Northern Columbia Process Equipment** 1234 Marine Drive North Vancouver C.-B.

Thermolec Ltd. 2175 Thimens Montreal H4R 1K8 (514) 336-9130 Distributeurs: **Cadmech Systems** 2112 Thimens St. Laurent Que. H4R 1K8 (514) 337-3612

Thorn Lighting 1400 Meyerside Drive Mississauga Ontario L5T 1H2 (416) 677-4248 Succursales: 6908A 6th St. E. Calgary Alberta T2H 2K4 (403) 259-4841 TELEX 03-822850 4632 Boul. Thimens St. Laurent Quebec H4R 2B2 (514) 336-7551 182 West 6th. Ave. Vancouver C.-B. V5Y 1K6 (604) 873-3937 TELEX 04-55476 600 Pine Glen Rd. Riverview N.B. (506) 386-2351 1420 Notre Dame Ave. Winnipeg Manitoba R3E 3G5 (204) 774-5223

Time Mark 11440 E. Pine Tulsa Oklahoma 74116 (918) 438-1220 Distributeurs: **The Pump House** 7004-B 5th St. SE Calgary Alberta T0H 2G3 **Art Rosenblum Sales, Ltd.** 7 Digby Court Willowdale Ontario M2R 2X5 (416) 665-4412

Timeco 1035-26th Street, PO Box 8036 Huntington WVA 25705 (304) 523-5149 Distributeurs: **Higginson Equipment Sales Ltd.** 1131 Pettit Road, PO Box 5011 Burlington Ontario L7R 3Z4 (416) 335-2211 Toronto 364-1018

Tork Canada 69 Westmore Dr. Rexdale Ontario M9V 3Y7 (416) 745-2662 Représentants: **Esco Sales Ltd.** 2399 Cawthra Rd.—Suite 207 Mississauga Ontario L5A 2W9 (416) 275-9621 **RJS Electrical & Mechanical Sales, Ltd.** 2300 Stevenage Dr. Box 1 Ottawa Ontario K1G 3W3 (613) 822-0772 **PDM Electrical Products, Ltd.** 345 Isabey St. Laurent Quebec H4T 1Y2 (514) 342-6585 **PDM Electrical Products, Ltd.** 3885 Boul Hamel C.P. 272 Ancienne-Lorette Quebec G2E 3M3 (418) 871-8039 **J.A. Hughes and Associates** 884 Saddle St. Port Coquitlam C.-B. V3C 3N2 (604) 872-7217 **Loumond Sales Ltd.** 942 Erin St. Winnipeg Manitoba R3G 2W5 (204) 774-1727 **Q.R. Agencies** 416 1023-15 Ave. SW Calgary Alberta T2R 0S5 (403) 245-2755 **P.O. Box 320** Chester N.S. (902) 275-3297

Toronto Coppersmithing Int'l. 220 Midwest Rd. Scarborough Ont. M1P 3A9 (416) 751-4640 Succursale: Torco Engineered Products 3975 North Road Burnaby C.-B. V3J 1S2 (604) 421-1963

Toyoda America One World Trade Center Suite 5067 New York NY 10048 Distributeurs **Utility & Industrial Supply, Ltd.** 647 Kiddco Street Sarnia Ontario N7T 7J7 **Utility & Industrial Supply, Ltd.** 14 A Taber Road Rexdale Ontario M9W 3A5 **Utility & Industrial Supply, Ltd.** C.P. 120 Succursole Quebec J4H 3W6 **Westech Industrial, Ltd.** 134 Forge Road Calgary Alberta T2H 0S8

Trans Canada Glass 270 S.E. Marine Drive Vancouver C.-B. V5W 3T5 (403) 324-8511 Succursales: 270 S.E. Marine Drive Vancouver C.-B. V5X 2S6 (604) 324-8511 2521 Kenworth Road Nanaimo C.-B. V9T 3M4 (604) 758-0111 1960 Dayton Street Kelowna C.-B. V1Y 7W6 (604) 860-6522 Box 82 Cranbrook C.-B. V1C 4H6 (604) 489-2701 320-28th St. N.E. Calgary Alberta T2A 5R2 (403) 273-1316

Transmation Canada 170 Brockport Drive Rexdale Ontario M9W 5C8 (416) 675-5980 Succursale: 1324-11th Avenue S.W., Ste. 309 Calgary Alberta T3C 0M6 (403) 245-8712

Tranter Canada 6700 Finch Ave. W. Rexdale Ont. M9W 5P5 (416) 741-4254

Trecan 4540 Dixie Rd. Mississauga Ont. L4W 1N2 (416) 625-4030 Succursale: 1480 Logan Longueuil Que. J4K 1J6 (514) 651-1410

Tremco (Canada) 220 Wicksteed Ave. Toronto Ontario M4H 1G7 (416) 421-3300

Trerice, H.O. 2395 Cawthra Rd. Suite 3 Mississauga Ont. L5A 2W8 (416) 276-2340 Succursales: 1935 Huron Church Road Windsor Ontario N9C 2L6 12529-127th Street Edmonton Alberta T5L 1A3 2362A 46E Avenue Lachine Quebec H8T 2P3 **Agents: Atlantic Transfer Heat Limited** Bedford Trade Mart, Unit 3 P.O. Box 1166 Bedford N.-É. B0N 1B0 **Chempac Supply Limited** P.O. Box 637, Lochlomond Road, St-jean N.-B. E2L 4A5 **Marcel & Hubert Dufresne** 1150 Galt E. Sherbrooke Quebec J1G 1Y5 **Highwood Sales Limited** P.O. Box 723 Regina Saskatchewan S4P 3A8 **Lytle Specialties Limited** 102 King Edward Street East Winnipeg Manitoba R3H 0N8 **Mentec Industrial Equipment Limited** 1149 Vanier Road, Unit 3 Sarnia Ontario N7S 3Y6 **Walmar Mechanical Sales** Div. of KF-RB Agencies Limited Nepean Ontario K2G 0B1 **Northern Mechanical Sales** 242 Covington Street P.O. Box 1073 Garson Ontario P0M 1V0 **Spence Winters Agencies Limited** 412 Elizabeth Avenue P.O. Box 7142, St-jean T.-N. A1E 1Y3 **Louis P. Truchon Inc.** 1190 Dorchester N. Quebec Quebec G1L 4L8 **Western Air Conditioning Limited** #15, 1916-30th Avenue N.E. Calgary Alberta T2E 7B2 **Western Air Conditioning Limited** 1401 West Broadway Vancouver C.-B. V6H 1H6 **Northern Engineering & Supply Co. Ltd.** 114 Miles Street Thunder Bay Ontario P7C 1J4

Trimax Controls 1180 Miraloma Way Sunnyvale CA 94086 (408) 737-0950 Distributeurs: **Gen-Tec, Inc.** 2625 Dalton Sainte-Foy Quebec G1P 3S9 (418) 651-8000

U

U.E. Systems 1995 Broadway New York NY 10023 (212) 787-1152 Distributeurs: **Can Am Instruments** 1938 Mattawa Ave. Mississauga Ont. L4X 1K1 (416) 277-4541

Fournisseurs

Uehling Instrument 473 Getty Avenue P.O. Box 2157 Paterson N.J. 07509 (201) 742-8710 Représentants: **Bestobell Canada Ltd.** 245 Norseman Street Toronto Ontario M8Z 2R5 (416) 231-9216

Union Pump 87 Capital Avenue, S.W. Battle Creek Michigan 49016 (616) 962-6141 Succursales: 4211 Mainway Burlington Ontario L7L 5N9 (416) 827-7441 407 Speers Road, Suite 202 Oakville Ontario L6K 3T5 (416) 842-4120 181 Cercle Marina Pointe Claire Quebec H9S 4B4 (514) 694-7360 #101, 616 71st Ave., S.E. Calgary Alberta T2H 2R1 (403) 253-9181

United Air Specialists 4440 Creek Rd. Cincinnati Ohio 45242 (513) 891-0400 Succursale: 15 Bowes Rd., Unit 14B Concord Ont. L4K 1B1 (416) 669-5000 Représentants: **General Equipment Ltd.** 15 East 4th Avenue Vancouver C.-B. V5T 1G1 (604) 876-8881 **General Equipment Ltd.** 10561 108th Street Edmonton AB T5H 2Z8 (403) 423-4488 **General Equipment Ltd.** Unit 2, Bldg. B 1253 Clarence Avenue Winnipeg MB R3T 1T4 (204) 453-4745 **Tepro Industrial Ltd.** 224 Fleur DeLys Pont Viau Laval PQ H7G 2K7 (514) 389-1379 **General Equipment Ltd.** P.O. Box 5603, Station A Calgary AB T2H 1Y1 (403) 252-9941 **General Equipment Ltd.** P.O. Box 237 Saskatoon SK S7K 3L1 (306) 244-2440 **Henlex Industries Ltd.** 1300 boul. Jules Poitras Montreal PQ H4N 1X8 (514) 337-3331

United Electric Controls (Canada) 85 School Street Watertown MASS 02172 (617) 926-1006 Distributeurs: **Brian Engineering Limited** 99 Rocky Lake Drive Bedford N.-É. B4A 2T3 (902) 835-8322 **Brian Engineering Limited** 2445 Duncan Montreal H4P 2A2 (514) 735-1671 **E. W. Playford Co. Ltd.** 5851 Upper Lachine Montreal H4A 2B8 (514) 489-5383 **E. W. Playford Co. Ltd.** 29 Bayswater Avenue Ottawa Ontario K1Y 2E5 (613) 725-1144 **Annutronics Mechanical Ltd.** 3550 Wolfedale Road, Unit #2 Mississauga Ontario L5C 2V6 (416) 272-1045 **Brian Engineering Limited** 25 Shaft Road Rexdale Ontario M9W 4M3 (416) 248-0226 **Brian Engineering Limited** 3-20 Steckle Place Kitchener Ontario N2E 2C3 (519) 893-7474 **Annutronics Mechanical Ltd.** 46 Royal Crescent Sarnia Ontario H7S 4Z5 (519) 336-8698 **Brian Engineering Limited** 880 Philip Street Sarnia Ontario N7T 1Z6 (519) 337-7591 **Brian Engineering Limited** 735 Harold Crescent Thunder Bay Ontario P7C 5H8 (807) 623-2155 **Haney Agency (1975) Ltd.** 60 Stevenson Road Winnipeg Manitoba R3H 0W7 (204) 632-9161 **Barber Engineering & Controls Ltd.** 5728-1st Street, S.W. P.O. Box 5455, Station A Calgary Alberta T2H 1X8 (403) 252-7651 **N Barber Engineering & Controls Ltd.** 8803-58 Avenue Edmonton Alberta T6E 5X1 (403) 468-6950 **Thos. W. MacKay & Son Ltd.** 1807 Fir Street Vancouver C.-B. V6J 3A9 (604) 731-6561

United McGill 200 East Broadway Westerville OH 43081 (614) 882-7401 Représentants: **E.H. Price Sales, Ltd.** 619-36th Avenue, N.E. Calgary Alberta T2E 2L8 (403) 277-0787

Uraken Canada 553 boul. Industriel St. Eustache P.Q. J7R 5R3 (514) 472-7272

Utica Steam Engine & Boiler Works P.O. Box 45 Center Square PA 19422 (215) 278-0600

Utility & Industrial Supply P.O. Box 999 Sarnia Ont. N7T 7K6 (519) 344-3614 Succursale: 14A Taber Rd. Rexdale Ont. M9N 3A5 (416) 743-3303

V

Valcor Engineering One Lawrence Rd. Springfield NJ 07081 (201) 467-8400 Représentants: **Finnan Engineered Products Ltd.** 1149 Bellamy Road North Unit 22 Scarborough Ontario M1H 1H7

Valera Electronics 1733 St. Laurent Blvd. Ottawa Ontario K1G 3V4 (613) 526-1660 Succursale: 8 Brock Street Brockville Ontario K6V 4E6 (613) 342-0570

Valiance Brown 176 Shaw Street P.O. Box 2016 Hamilton Ontario L8N 3S2 (416) 522-1347 Succursales: 265 Tecumseh St. P.O. Box 460 Sarnia Ontario N7T 2L1 (519) 332-1112 131 Dieppe Road P.O. Box 3003 St. Catharines Ontario L2R 7B8 (416) 684-4305 West Front P.O. Box 575 Cornwall Ontario K6H 5T3 (613) 932-0320 238 Gage Ave. N. P.O. Box 2071 Hamilton Ontario L8N 3R5 (416) 544-1900 72 Stafford St. Toronto Ontario M6J 2R9 (416) 363-3143 90 Fairview Ave. P.O. Box 2010, Stn. "A" London Ontario N6A 4C5 (519) 438-5161 410 Bank Street Ottawa Ontario K2P 1Y8 (613) 238-8931 256 Attwell Drive Toronto Ontario (416) 675-7070 1156 Lariviere Rouyn Quebec J9X 5C4 (819) 762-7721 21 Government Road Kirkland Lake Ontario P2N 3H9 (705) 567-3251

Valv-All Canada 1585 Sedlescomb Dr. Mississauga Ont. L4X 1M4 (416) 624-4096 Succursale: **Compresseurs Valv-All Inc.** 6180 Vanden Abeele Ville St. Laurent Que. H4P 1P5

Van Leer Plastics 64 Industrial Parkway P.O. Box 4023 Woburn MA 01888 (617) 935-7850 Distributeurs: **Guildwood Nordell** 1085 The Parkway London Ontario N6A 2W8 (519) 672-3440 **Jay Nard Holdings** 1-4604-13th St. N.E. Calgary Alberta T2E 6P1 (403) 276-4487 **Suntex Ltd.** 4315 Canada Way Burnaby C.-B. V5G 1J3 (604) 430-2491

Vapor Canada 3955 Ave. Courtrai Montreal Quebec H3S 1B9 (514) 342-3210

Vari-Cool/H&C 3555 Airway Dr. Santa Rosa CA 95402 (707) 546-1077 Représentants: **Dumill Agency** 717 E. Hasting St. Vancouver C.-B. V6A 1R3 (604) 251-1526

Veeder-Root of Canada 26 Fieldway Rd. Toronto Ontario (416) 239-3094

Velan Inc. 2125 Avenue Ward Montreal P.Q. H4M 1T6 (514) 748-7743 Représentants: **Donaldson, Pyrch & Hume** Burnaby C.-B. **DPH Industries** Edmonton Alberta **DPH Industries** Calgary Alberta **Lytle Specialities Ltd.** Dartmouth N.-É. Montreal Quebec Sarnia Ontario Toronto Ontario Winnipeg Manitoba Calgary Alberta Edmonton Alberta Stoney Creek Ontario **ITT Grinnell** Calgary Alberta Dartmouth N.-É. Edmonton Alberta Montreal Quebec Nanaimo C.-B. Regina Saskatchewan Richmond C.-B. Sarnia Ontario Stoney Creek Ontario Toronto Ontario Winnipeg Manitoba

Venair 7950 Alfred Anjou Que. H1J 1J1 (514) 354-2230 **Agents: Venaire Inc.** 530 Champagne Drive Downsview Ontario M3J 2T9 (416) 636-7728 **Blair Campbell Agencies** 2460 Kingsway Port Coquitlam B.C. V3H 1T4 (604) 464-6144 **D. A. Robertson Agencies Ltd.** 540 Marjorie Street Winnipeg Manitoba R3H 0S9 (204) 774-1714 **McKenna Agencies Ltd.** 14705, 122nd Avenue Edmonton Alberta T5L 2W4 (403) 454-6502 **Morton Industrial Sales Ltd.** 601 Manitou Road S.E. Calgary Alberta T2H 1X3 (403) 243-3421

Venmar 1715 Haggerty Drummondville Que. J2C 5P7 (819) 477-6226 Succursale: 80 Centennial Road Orangeville Ontario L9W 1P9 (519) 941-3080

Veronics Instruments 2333 Millrace Ct. Mississauga Ontario L5N 1W2 (416) 826-7404

Vibron 1720 Meyerside Drive Mississauga Ontario L5T 1A3 (416) 677-4922 Succursales: 1433 Est Rue Fleury Montreal Quebec H2C 1R9 (514) 384-3388 7001 Mumford Road Tower 2 Suite 3030 Halifax N.-É. B3L 4R3 (902) 455-3112

Vic Manufacturing 1620 Central Ave. Minneapolis MN 55413 (612) 781-6601

Viking Pump Co. of Canada 661 Grove Ave. Windsor Ontario N9A 6M3 (519) 256-5438 Succursales: 2569 De Miniac St. Laurent Quebec (514) 332-4824 1184 Sanford Street Winnipeg Manitoba (204) 786-6687 3143 Thunderbird Crescent Burnaby C.-B. V5A 3G1 (604) 421-5335 245 Baig Blvd. P.O. Box 942 Moncton Nouveau-Brunswick (506) 388-4204

Vitec 23645 Mercantile Rd. Cleveland Ohio 44122 (216) 464-4670 Succursales: 55 Six Point Road Toronto Ontario M8Z 2X3 (416) 239-8161 Box 23526 Vancouver C.-B. V7B 1W2 (604) 872-8106

Vitrerie Mont-Laurier 1242 Route 111 Est Amos Quebec J9T 1N1 (819) 732-6431

Vitter International 2217 South 1st Street Milwaukee Wisconsin 53207 (414) 744-0111

Viz Manu. 335 E. Price St. Philadelphia PA 19144 (215) 844-2626 Représentants: **H.W. Cowan Canada Ltd.** P.O. Box 268 Richmond Hill Ontario L4C 4Y2 (416) 773-4331

W

Wahl International 5750 Hannum Ave. Culver City Calif. 90230 (213) 641-6931 Représentants: **Elkon Electrical Co. Ltd.** 1961-55e Ave. Dorval Quebec H9P 1G9 (514) 636-0510

Wallace Ventilating Equip Co. 10 Dansk Court, Unit 9 Rexdale Ontario M9W 5T8 (416) 675-1477

Water Conditioning Canada 555 Park Street Regina Sask. S4N 5B2 545-6990 Succursales: 262 Manitou Drive Kitchener Ontario N2C 1L3 (519) 893-6830 402A-53rd Avenue S.E. Calgary Alberta T2H 0N4 (408) 253-4854

Water Refining 475 Edward Ave. Richmond Hill Ontario L4C 5E5 (416) 698-7374

Watkins & Assoc., S.L. 501 York Mills Rd. Don Mills Ontario M3B 1X7 (416) 444-2913

Waugh Controls 9001 Fullbright Ave. Chatsworth CA 91311 (213) 998-8281 Représentants: 134 Forge Rd. S.E. Calgary Alberta T2H 0S8 (403) 252-8803 Unit #7, 7290 Borbram Rd. Mississauga Ontario L4T 3Y8 (416) 676-145 **Westech Industrial Ltd.** 179 Seneca Road Sherwood Park Edmonton Alberta (403) 464-4740

Weed Instrument Company, Inc. 707 Jeffrey Way Round Rock TX 78664 (512) 258-7043

Fournisseurs

Weiss Instruments 85 Bell Street W. Babylon N.Y. 11704 (516) 752-1655 Représentants: **Winters Thermogauges** Box 81 Agincourt Ontario M1P 3E6 (416) 296-8805 **MacMor Industries** 50 Myrtle St. Winnipeg Manitoba R3E 2R2 (204) 786-5892

Weiss Usa P.O. Box 660 6340 Dillenburg W. Germany (215) 234-8000

Wellons P.O. Box 381 Sherwood Oregon 97140 (503) 625-6131 Succursale: Volcano, Ltée. 4300 Ave. Beaudry St. Hyacinthe Quebec J2S 8A5 (514) 774-5326

Wer Canada 297 Idema Rd. Markham Ontario L3R 1B1 (416) 475-9290 Succursale: 182, Perth St. Stratford Ontario N5A 3Y4 (519) 273-3523

Wescraft Manufacturing P.O. Box 2000 Saanichton C.-B. V0S 1M0 (604) 652-1131 Succursales: 3737 Scott St. Burnaby C.-B. V5J 5A7 (604) 438-5540 3261 Westsyde Rd. Kamloops C.-B. V2B 7G9 (604) 579-9211 2508 Kenworth Rd. Nanaimo C.-B. V9T 3Y4 (604) 758-2441

West Instrumant Gulton Ind. Park E. Greenwich R.I. 02818 (401) 884-6800 Représentants: **Marcland Instrument** 156 St. Denis St. Lambert Quebec J4P 2G2 (514) 866-4607

West Way 595 Speers Rd. Oakville Ontario L6K 2G4 (416) 844-9781

Westcan Electrical Mfg. 192 Mary Street Brantford Ontario N3S 3C2 (519) 759-2040 Succursale: 310 Commercial Drive Vancouver C.-B. V5L 3V6 (604) 253-3108

Westeel Rosco 1 Atlantic Ave. Toronto Ontario M6K 1X7 (416) 537-4411 Succursales: 5515-40th Street, S.E. P.O. Box 2600, Stn. "M" Calgary Alta. T2P 3C1 (403) 279-2700 Halifax 60 Simmonds Drive Dartmouth N.S. B3B 1P6 (902) 466-2461 6210-75th Street P.O. Box 5740, Stn. "L" Edmonton Alta. T6C 4G2 (403) 469-4909 3022 Osler Street Box 6155, Stn. "D" London Ontario N5W 5R6 (519) 451-9070 Montreal 770 boul. Guimond Longueuil Quebec J4G 1S3 (514) 651-8100 Corner Island Hwy. & Fielding Rd. P.O. Box 780 Nanaimo C.-B. V9R 5M2 (604) 754-1238 1601 Michael Street Ottawa Ontario K1B 3T7 (613) 745-6831 British Columbia Railway Industrial Site 2001 Industrial Way Prince George C.-B. V2N 2K8 (604) 562-5577 1200 de la Canardiere C.P. 1123 Terminus Quebec P.Q. G1K 7C3 (418) 522-6492 540-10th Avenue, East P.O. Box 500 Regina Sask. S4P 3A2 (306) 525-5481 240 Melville Street P.O. Box 1370 Saskatoon Sask. S7K 3P5 (306) 653-0061 3091 Harrison Court R.R. #1 Burlington Ontario L7R 3X4 (416) 335-6960 Southview Drive P.O. Box 6 Site 31 R.R. #4 Sudbury Ontario P3E 4M9 (705) 522-0545 4751 Greig Avenue Terrace C.-B. V8G 1N3 (604) 635-6581 R.R. #2 Highway 17 West Box 606 Thunder Bay F Ontario P7C 4W8 (807) 939-2657 1 Atlantic Avenue Toronto Ontario M6K 1X7 (416) 537-4411 8750 Ash Street Box 8037, Stn. "L" Vancouver C.-B. V6P 6C7 (604) 325-3251 Mile 910 Alaska Hwy. P.O. Box 4177 Whitehorse Y.T. (403) 668-4300 Winnipeg 450 Desautels Street St. Boniface Man. R3C 2N5 (204) 233-7133 361 Attwell Drive Rexdale Ontario M9W 5C2 (416) 675-2370 345 Attwell Drive Rexdale Ontario (416) 675-7990

Western Research 1313-44 Avenue N.E. Calgary Alberta T2E 6L5 (403) 276-8806

Westinghouse Canada P.O. Box 510 Hamilton Ontario L8N 3K2 (416) 528-8811 Bureaux dans les grandes villes du pays.

Westinghouse Vectrol 110 Douglas Road P.O. Box 819 Oldsmar Florida 33557 (813) 955-4621 Succursale: Westinghouse Canada 286 Sanford Ave. North P.O. Box 510 Hamilton Ontario L8N 3K2 (416) 520-8811

Westroc Industries 2650 Lakeshore Highway West Mississauga Ontario L5J 1K4 (416) 823-9881 Succursales: 6205 Boulevard Hebert Ville Ste-Catherine Quebec J0L 1E0 (514) 632-5440 1200 Empress Street Winnipeg Manitoba R3E 3B4 (204) 786-3426 6715 Ogden Dale Road S.E. Calgary Alberta T2C 2A4 (403) 279-0113 2995 Wall Street Vancouver C.-B. V5K 1B5 (604) 254-1311

Westron 2066 Ave. Chartier Dorval P.Q. H9P 1H2 (514) 631-6708

Wetcom Engineering 222 Midwest Road Scarborough Ontario M1P 3A9 (416) 759-8595

Wilcorp Mfg. 115 Tycos Dr. Toronto Ontario M6B 1W3 (416) 789-1164

Wilgood P.O. Box 1247 Dunnellon Florida 32630 (904) 488-5521, 489-6924

Willer Engineering 422 Consumers Road Willowdale Ontario M2J 1P8 (416) 499-4421

William G. Montgomery Ltd. Unit #23 3135 Universal Dr. Mississauga Ont. L4X 2E6 (416) 625-4095

Wilson Sales, T. W. 2244 Drew, Unit 5 Mississauga Ontario L5S 1B1 (416) 677-8200

Wing Co. 125 Moen Ave. Cranford N.J. 07016 (201) 272-3600

Winter's Thermogauges 2220-3 Midland Ave. Scarborough Ontario M1P 3E6 (416) 291-8805

Wiremold Canada 5915 Atlantic Dr. Mississauga Ontario L4W 1S4 (416) 677-3934

Withers Environmental 3133 Surner Avenue Burnaby C.-B. V5G 3E3 (604) 435-8175 Succursale: 1111 Brevik Place Mississauga Ontario L4W 3R7 (416) 625-7566

Woods Fans 5112 Timberlea Boulevard Mississauga Ontario L4W 2S5 (416) 624-8300 Représentants: **Square M Engineering** 3061 Grandview Highway Vancouver C.-B. V5M 2E4 (604) 430-2264 **J.R. Stephenson Ltd.** 3624 Manchester Rd. S.E. Calgary Alberta T2G 3Z5 (403) 287-1930 **J.R. Stephenson Ltd.** 11627-145th Street Edmonton Alberta T5M 1V9 (403) 454-4596 **H.V.A.C. Sales** 199 North Leonard Street Regina Saskatchewan S4P 5X5 (306) 545-0477 **J.R. Stephenson Ltd.** 555 Madison Street Winnipeg Manitoba R3H 0L6 (204) 775-8561 **E & M Designed Sales & Services** 63 Cumberland Cres. London Ontario N5X 1B7 (519) 679-9576 **Davie Environmental** 25 Kelfield St. Rexdale Ontario M9W 5A1 (416) 244-5586 **James Black and Associates** 21 Capital Drive Nepean Ontario K2G 0E7 (613) 226-1213 **Patrick Garreau and Assoc.** 5775 Ferrier Montreal Quebec H4P 1N3 (514) 733-9961 **Thermac Limited** P.O. Box 534 65 Prince Albert Rd. Dartmouth N.-E. B2Y 3Y8 (902) 463-2032 **Terace Corp.** 897 Kipling Ave. Toronto Ontario M8Z 5H3 (416) 231-6549 **Terace Corp.** 945 Canbriar Heights Drive Sudbury Ontario H4T 1W2 (705) 560-0604 **Terace Corp.** 750 Boulevard MacCarther St. Laurent Quebec H4T 1W2 (514) 337-5086 **Beinac** 826-56 Street E. Saskatoon Saskatchewan S7K 3R8 (306) 242-3844 **Beinac** 837 West Hastings St. Suite 1015 Vancouver C.-B. V6C 1C4 (604) 682-6561 **Beinac** 120 Wallinger Ave. Kimberly C.-B V1A 1Y8 (604) 427-4818 **Beinac** P.O. Box 219 Sparwood C.-B. V0B 2G0 (604) 425-6247 **Beinac** 3265 Parsons Rd. Edmonton Alberta P6N 1B4 (403) 463-7984 **Beinac** 920-26th Street N.E. Calgary Alta. T2A 2M4 (403) 235-2500 **Beinac** 871-15th Street S.W. Medicine Hat Alberta

Worthington 37 Coats St. Wellsville New York 14895 (716) 593-1234 Représentants: **McRae Engineering Equipment** Unit 21, 2 Thorncliffe Park Drive Toronto Ontario M4H 1H2 (416) 422-3735 **Worthington Canada Ltd.** 4180 Dundas Street, West Toronto Ontario M8X 1Y1 (416) 239-4881 **Worthington Canada Ltd.** 4030-7th Street S.E. Calgary Alberta T2G 2Y8 (403) 243-6046 **Worthington Canada Ltd.** Suite 320 145 West 17th St. North Vancouver C.-B. V7M 1V5 (604) 987-4551

Wright, P.M. 1300 Jules Poitras Montreal H4N 1X8 (514) 337-3331 Succursales 1111 Finch Ave. West Downsview Ontario M3J 2E5 (416) 665-8733 230 78e Rue, Est. Charlesbourg Que. G1H 1C9 (418) 626-7034

Wright-Austin 1140 Crawford Ave. P.O. Box 7267 Windsor Ontario N9C 3Z1 (519) 255-9740

Wylain Canada 126 East Dr. Brampton Ontario L6T 1C2 (416) 791-3330 Succursales: 17 Hazelton Ave., Moncton N.B. E1A 4J5 (506) 855-1156 21 Long Island Dr. Manotick Ontario K0A 2N0 (613) 692-4534 467 Briarhill Ave. London Ontario N5Y 1P3 (519) 455-8780 100 boul. Alexis Nihon (875) Montreal P.Q. H4M 2P4 (514) 747-1131 783 Oakdale Dr. Winnipeg Man. R3R 1AZ (204) 832-3464 207 Deerbow Circle S.E. Calgary Alta. (403) 271-3076 1334 St. Stephens Pl. North Vancouver C.-B. V7J 3H9 (604) 985-0797

Wynn's Canada 1025 Westport Crescent Mississauga Ontario L5T 1E8 (416) 671-4260

Y

Yarway Canada 287 Speedvale Ave., West Guelph Ontario N1H 1C5 (519) 824-8500 Succursales: Room 802, 1039-17th Ave. S.W. Calgary Alberta T2T 0B1 (403) 245-4557 4823 Sherbrooke ouest Montreal Quebec H2Z 1G7 (514) 935-6424

York Instruments 1262 Don Mills Road, Suite 65 Don Mills Ontario M3B 2W7 (416) 445-1255

York Lighting 1320 boul. Jules Poitras Ville St. Laurent H4N 1X7 (514) 334-7850 Succursales: 1214 Kamato Rd. Mississauga Ontario L4W 1Y1 (416) 625-8289

York Shipley 1297 Industrial Rd. Cambridge Ontario H3H 4S6 (519) 653-7172

Young Radiator 2825 4 Mile Road Racine WI 53404 (414) 639-1010 Représentants: **Walter Kootow Limited** 2220 Midland Avenue, 3B Scarborough Ontario M1P 3E6 (416) 291-8805 **On-Site Power, Limited** 1935-27th Avenue N.E. Suite 108 Calgary Alberta T2E 7E4 (403) 276-3366 Succursale: Norgrad Engineering Sales P.O. Box 11, Station C Winnipeg Manitoba R3M 3S3 (204) 338-5404

Z

Z-Air Fabrication 690 Place Trans-Canada Longueuil Quebec J4G 1P2 (514) 527-4541

Zedex Products Box 602, Stn. B. Willowdale Ontario M2K 2P9 (416) 441-2353

Zenith Controls 830 W. 4th St. Chicago Illinois 60609 (312) 247-6400 Représentants: **Henderson-Oliver Sales** 572 Fenmar Drive Weston Ontario M9L 2S4 (416) 743-7391

Zero Energy Products 2218 Avenue C North Saskatoon Sask. S7L 6C3 (306) 665-2022

Zero-Max 2845 Harriet Ave. So. Minneapolis MN 55408 (612) 872-6300 Représentants: **Edward H. Pope Ltd.** 180 Bartor Road Weston Ontario M9M (416) 749-4504

3M Canada C.P./Box 5757 London Ontario N6A 4T1 (519) 451-2500 Succursales: 95 Akerley Blvd. Unit "E" Dartmouth N.-É. B3B 1R7 (902) 463-8870 445 rue Bleriot St. Foy Quebec G1P 3A9 (418) 651-6115 1155 Lola Street Ottawa Ontario K1K 4C1 (613) 741-2007 155 Lesmill Rd. Don Mills Ontario M3B 2T8 (416) 449-8010 85 Muir Rd. Winnipeg Manitoba R2X 2X7 (204) 633-6143 642 Henderson Drive Regina Sask. S4N 5X3 (306) 949-0666 1001, 53rd Avenue N.E. Calgary Alberta T2E 6X9 (403) 275-7330 6307 Wagner Rd. Edmonton Alberta T6E 4N4 (403) 468-4222 7100 River Road Richmond C.-B. V6X 1X5 (604) 273-2211

Lexique

A

Additif/*Additive*
Adoucisseur/*Conditioner*
Ampèremètre/*Ammeter*
Anémomètre/*Anemometer*

B

Brûleur/*Burner*
Brûleur axial/*Axial-flow burner*

C

Caloduc/*Heat pipe*
Calorimètre/*Heat meter*
Cellule photoélectrique/*Photocell*
Chaudière/*Boiler—Vessel*
Chicane/*Baffle*
Clapet/*Damper*
Combustible pour soutes/*Bunker oil*
Commutateur par ultrasons/*Untrasonic sound switch*
Compresseur à piston/*Reciprocating compressor*
Compresseur rotatif/*Rotary compressor*
Condensateur/*Condensor*
Condensateur (élec.)/*Capacitor*

D

Débitmètre/*Flowmeter*
Dépôt boueux/*Sludge*
Dépôt calcaire/*Scale*
Désaération/*Deaeration*
Dessicateur/*Dehumidifier*
Déstratification/*Destratification*
Détecteur cinétique/*Movement sensor*
Disjoncteur à réenclenchement/*Reset switch*
Distribution par boucles/*Run-around loop*

E

Eau d'alimentation/*Feedwater*
Économiseur/*Economiser*
Effluent/*Effluent*
Entartrage/*Slagging*
Étanchéité à l'air/*Air tightness*

F

Facteur de puissance (élec.)/*Power factor*
Fibre céramique/*Ceramic fibre*
Fibre minérale/*Mineral fibre*
Fonctionnement cyclique/*Duty cycling*
Fonctionnement minuté/*Time-based scheduling*

G

Gaz en carneau/*Flue gas*
Gestion des charges/*Load management*
Gradateur/*Dimmer*

H

Halogène/*Metal halide*

I

Indicateur de consommation/*Demand controler*
Isocyanidate/*Isocyanurate*

L

Lentille/*Lens*
Limiteur de consommation/*Demand limiter*

M

Manomètre/*Pressure gauge*
Minuterie/*Timer*

P

Pellicule/*Film*
Planificateur de charge/*Load scheduler*
Pointe (élec.)/*Peak*
Pression négative/*Negative pressure*
Puissance (élec.)/*Wattage*
Purge/*Blowdown*
Purgeur à clapet/*Disc trap*
Purgeur à cloche inversée/*Inverted bucket trap*
Purgeur à cloche ouverte/*Open bucket trap*
Purgeur à flotteur/*Float trap*
Purgeur à soufflet/*Bellows-type trap*
Purgeur automatique/*Steam trap*
Purgeur bimétallique/*Bimetallic trap*
Purgeur thermodynamique/*Thermodynamic trap*
Purgeur thermostatique/*Thermostatic trap*

R

Réchauffeur/*Preheater*
Récupérateur/*Recuperator*
Réflecteur/*Reflector*
Refroidisseur/*Chiller—Cooler*
Régulateur de cycle/*Cycler*
Réservoir/*Tank*
Réservoir de détente/*Flash tank*
Réservoir de refroidissement/*Cooling pond*
Résine phénolique/*Phenolic*
Ressource hydraulique/*Water Resource*
Rideau en bandes/*Strip curtain*

S

Stockage thermique/*Thermal storage*
Système de climatisation/*HVAC*

T

Tachymètre/*Tachometer*
Thermopompe/*Heat pump*
Tour à pulvérisation/*Spray pond*
Tour à tirage mécanique/*Mechanical draft tower*
Tour à tirant naturel/*Draft tower*
Tube-résistance/*Ballast*
Turbine rotative de chauffage/*Rotary heat wheel*
Turbosoufflante/*Turbulator*

U

Uréthane/*Urethane*

V

Verrouillage/*Interlock*

Monsieur,/Dear Sir,

DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS
REQUEST FOR PRODUCT INFORMATION

Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:
Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:

(Produit/Product) _____

_____

_____

J'aimerais donc recevoir de plus amples renseignements sur ce produit:
Please send detailed information to:

Nom/Name: _____

Poste/Title: _____

Compagnie/Company: _____

Adresse/Address: _____

Tél./Tel.: _____

Remarques/Comments: _____

_____

_____

_____

Monsieur,/Dear Sir,

DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS
REQUEST FOR PRODUCT INFORMATION

Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:
Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:

(Produit/Product) _____

_____

_____

J'aimerais donc recevoir de plus amples renseignements sur ce produit:
Please send detailed information to:

Nom/Name: _____

Poste/Title: _____

Compagnie/Company: _____

Adresse/Address: _____

Tél./Tel.: _____

Remarques/Comments: _____

_____

_____

_____

Monsieur,/Dear Sir,

DEMANDE DE RENSEIGNEMENTS SUR LES PRODUITS
REQUEST FOR PRODUCT INFORMATION

Votre compagnie est citée au Répertoire canadien 1983 des produits d'économie d'énergie et des fournisseurs, en tant que fournisseur de:
Your company is listed in the 1983 Canadian Directory of Energy Conservation Products and Suppliers as a supplier of:

(Produit/Product) _____

_____

_____

J'aimerais donc recevoir de plus amples renseignements sur ce produit:
Please send detailed information to:

Nom/Name: _____

Poste/Title: _____

Compagnie/Company: _____

Adresse/Address: _____

Tél./Tel.: _____

Remarques/Comments: _____

_____

_____

_____

(Nom et adresse du fournisseur/Supplier's name and address)

_____

_____

_____

(Nom et adresse du fournisseur/Supplier's name and address)

_____

_____

_____

(Nom et adresse du fournisseur/Supplier's name and address)

_____

_____

_____